



United States  
Department of  
Agriculture

Forest Service

Alaska Region

Tongass  
National Forest  
R10-MB-325

April 1996



TABLE OF CONTENTS

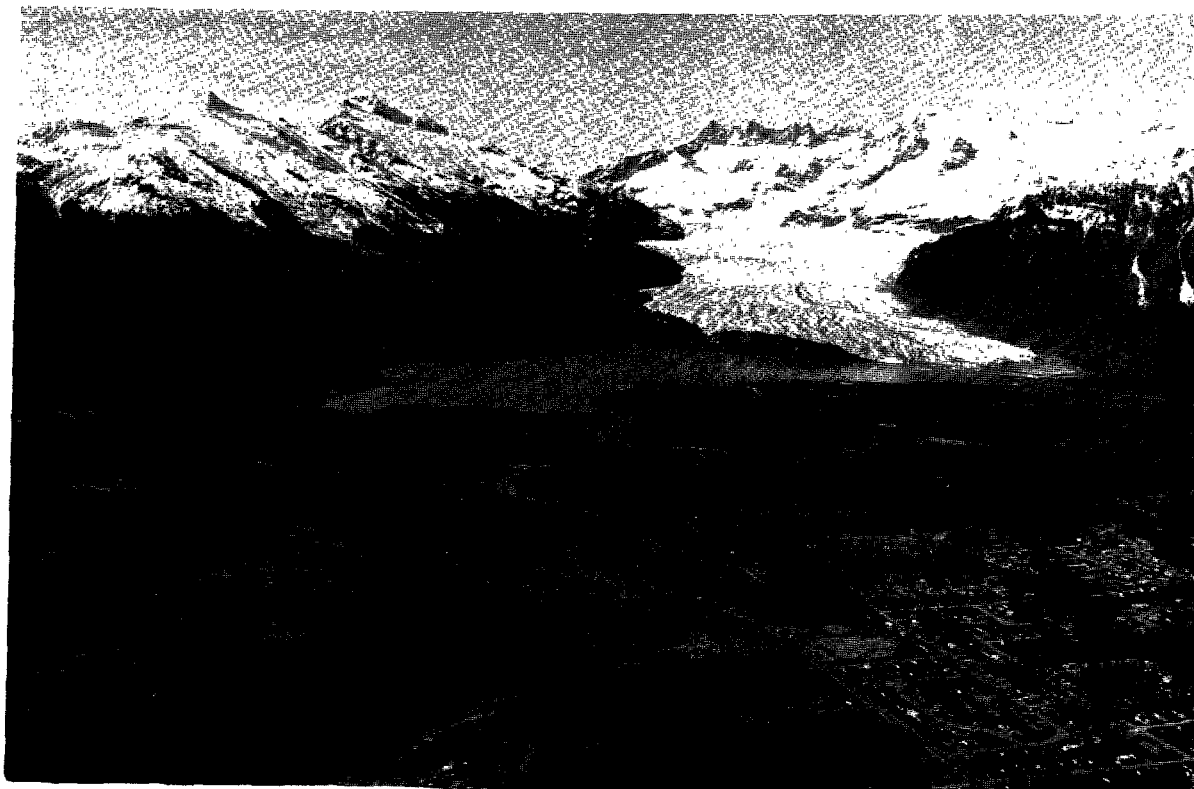
RECORD OF DECISION

# **Mendenhall Glacier Recreation Area Management Plan Revision Final Environmental Impact Statement**

**Alaska Region  
Tongass National Forest  
Chatham Area  
Juneau Ranger District**



**FILE COPY**



Cover photo credit: USDA Forest Service  
Mendenhall Glacier Recreation Area, early 1980's.

The United States Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means of communication of program information (braille, large print, audiotape, etc.) should contact the USDA Office of Communications at (202) 720-2791.

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, DC 20250, or call (202) 720-7327 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.

# **Record of Decision USDA Forest Service**

## **Mendenhall Glacier Recreation Area Management Plan**

### **Juneau Ranger District Tongass National Forest - Chatham Area**

April 4, 1996

This Record of Decision (ROD) contains my decision concerning whether or not to revise the 1975 Mendenhall Glacier Recreation Area Management Plan. Revisions to the 1975 Recreation Area Management Plan will result in a non-significant amendment to the Tongass Land Management Plan, and also an amendment to the Juneau Ranger District Off-Road Vehicle Management Plan. This decision is based upon the analysis and evaluation in the Mendenhall Glacier Recreation Area Management Plan Revision Final Environmental Impact Statement (FEIS).

Since implementation of the 1975 Management Plan, several situations have evolved including changes in recreation use patterns, conflicts among user groups, resource damage concerns, and new project opportunities. In response to these changes, efforts to revise the 1975 Management Plan were initiated, resulting in the development of alternatives to update and replace the existing 1975 Management Plan.

#### **Alternatives Selected for Detailed Evaluation**

The FEIS evaluates in detail six alternatives, including the No Action Alternative. The No Action Alternative is required under the National Environmental Policy Act (NEPA) and forms a baseline for comparing the environmental effects of the five action alternatives. The five action alternatives were developed to be a range of approaches, to respond to the five significant issues identified during public involvement and analysis for the Mendenhall Glacier Recreation Area Plan revision. The significant issues addressed are motorized recreational vehicle use, firearm use, commercial use, access, and fish and wildlife. Commercial allocation levels described in the alternatives below refer to summer use only (May 15 - September 15).

The range of alternatives from which I am making my decision are

##### **Alternative 1 - No Action**

Alternative 1 would continue current management practices. There would be no revision to the 1975 Recreation Area Management Plan.

### **Alternative 2 - Proposed Action**

Alternative 2 would prohibit firearm use throughout the Recreation Area and would allow off-road vehicle (ORV) use during the winter months on the west side of Mendenhall Lake when frozen. This alternative would establish commercial allocation levels up to 65% of capacity at the Visitor Center, on Mendenhall Lake, and on Mendenhall River. There would also be two new trailheads for access to the Recreation Area.

### **Alternative 3**

Alternative 3 would allow for a wider variety of developed recreation uses. These uses would include a designated ORV loop trail and use of firearms for waterfowl and snowshoe hare hunting in Dredge Lake and for ptarmigan and grouse hunting on McGinnis Mountain. It would establish allocation levels for commercial use up to 75% of capacity at the Visitor Center, Mendenhall Lake, and Mendenhall River, and up to 20% of capacity on three trails: East Glacier, West Glacier, and Moraine Ecology trails. Pending additional site specific environmental analysis, this alternative could also allow for new ORV trailheads into the Recreation Area, an emergency river rescue access, and development by the City and Borough of Juneau of cul-de-sacs for emergency vehicle turnarounds at five locations. There would also be additional public boat access behind an existing gate at Mendenhall Lake as well as allowing dispersed, undeveloped overnight camping on McGinnis Mountain.

### **Alternative 4**

Alternative 4 would set aside a small area for ORV use. Use of firearms would be allowed for ptarmigan and grouse hunting on McGinnis Mountain. This alternative would establish allocation levels for commercial use at the Visitor Center, on Mendenhall Lake, and on Mendenhall River up to 50% of capacity, and up to 20% of capacity on two trails: the East Glacier Loop and Nugget Creek trails. Trailheads would be the same as Alternative 2.

### **Alternative 5**

Alternative 5 would emphasize protective measures for wildlife, shorebirds, and migratory waterfowl, especially during sensitive nesting seasons. Consequently, this alternative would be the most restrictive on all recreation uses. Use of firearms as well as ORV's and snowmobiles would be prohibited throughout the Recreation Area. Allocation levels for commercial uses at the Visitor Center, on Mendenhall Lake, and Mendenhall River would be established at 1995 levels. No new access would be provided.

### **Alternative 6**

Alternative 6 is a combination of features from Alternatives 2 through 4, developed in response to public comments on the Draft Environmental Impact Statement (DEIS). This alternative restricts ORV use to winter months on the west side of Mendenhall Lake. In the Dredge Lakes Unit, firearm use is restricted to the use of shotguns during waterfowl and snowshoe hare seasons. Mt. McGinnis is open to use of shotguns and rim-fire .22 caliber rifles during ptarmigan and grouse hunting season. Allocation levels for commercial uses could be established up to 65% of capacity for the Visitor Center, on Mendenhall Lake and on Mendenhall River, and up to 20% of capacity for commercial use on three trails: the East Glacier, West Glacier, and Nugget Creek trails. Pending additional site specific analysis, Alternative 6 could allow two new trailheads, an emergency river rescue access, and allow the City and Borough of Juneau to develop cul-de-sacs for emergency vehicles at five locations. Alternative 6 would also allow public boat access behind an existing gate at Mendenhall Lake, as well as allowing dispersed, undeveloped overnight camping on McGinnis Mountain.

## **Environmentally Preferred Alternative**

Alternative 5 is the environmentally preferred alternative. The environmentally preferred is defined as the alternative which best protects, preserves, and enhances historic, cultural and natural resources, and which causes the least damage to the biological and physical environment.



## Decision

Based on the analysis and evaluation in the Final Environmental Impact Statement for the Mendenhall Glacier Recreation Area Management Plan Revision, it is my decision to select Alternative 6 (as set out in full in the FEIS, pages 1-2, 2-2, 2-3, 2-4, 2-5, 2-9, 2-10, 2-11, 2-19, 2-20, 2-22).

## Rationale for the Decision

I have selected Alternative 6 because it is consistent with current recreation management direction and policy (see FEIS Appendix B, Existing Management Direction), while addressing the significant issues and the wide array of public input during the environmental analysis process (see FEIS Appendix B, Responses to Public Comments). Clearly no single decision in the Mendenhall Glacier Recreation Area will satisfy all the needs and desires of the many people and interests which have communicated with us during the more than three year process of coming to this decision. However, I believe that Alternative 6 best balances and responds to current and future visitor needs from the Recreation Area while ensuring that the natural resources of this special area will be there to meet the needs of future generations.

Alternative 6 satisfies the purpose and need by developing a management strategy which provides more specific direction for the Recreation Area; addresses conflicts among recreational user groups; reduces risks to public health and safety; and protects the natural resources of this area.

Alternative 6 also follows the overall direction for the Recreation Area as stated in the proposed Recreation Area Management Plan, which is to:

Manage the area principally for recreation use while retaining the area substantially in its natural condition. Primary emphasis will be placed on protecting natural resource values while balancing natural resource use with human recreation needs.

It also reflects the Desired Future Condition in the proposed Recreation Area Management Plan which is to:

Remain relatively undeveloped, allowing for concentrated use at the Visitor Center and Mendenhall Lake Campground, allowing for moderately concentrated use at the West Glacier Trailhead, Skater's Cabin, and on Mendenhall River, allowing for dispersed, low to moderate use in the rest of the Recreation Area.

The recreation opportunities to be provided are intended to give visitors a chance to experience the Mendenhall Glacier and the glacial landscape "up close" yet not adversely impact the natural resources of the area. For local and out-of-town visitors alike, this area offers a unique opportunity to experience a glacier and the rebirth of a glacial landscape without being in a wilderness setting. The goal is to ensure both high quality recreation experiences and a healthy ecosystem that can provide for and sustain these high quality recreation experiences over an extended time.

Alternative 6 was also selected because it best addresses the significant issues that were raised during public scoping: motorized recreation vehicle use, firearm use, commercial use, access, and fish and wildlife.

### Motorized Recreation Vehicle Use

Alternative 6 provides for motorized recreational vehicle use in the winter on the west side of Mendenhall Lake when frozen. Except for administrative purposes (search and rescue, law enforce-

ment, trail maintenance, cross-country ski track setting, etc.), motorized recreational vehicle uses such as ORV's and snowmobiles in the Dredge Lakes Unit and motorized boats on Mendenhall Lake and Mendenhall River are prohibited. Motorized model airplane use will continue to be allowed in the Dredge Lakes Unit.

My decision is consistent with the existing management direction outlined in the 1975 Management Plan, which, while allowing ORV use in the Recreation Area, also states that "if the...management goals do not resolve the off-road vehicle conflict, the entire Recreation Area should be closed to off-road motorized vehicles, including snowmachines..." (1975 Management Plan, pg. 26, USDA Forest Service).

For the past 21 years, conflicts between motorized and non-motorized users have continued and we have been unable to resolve them. At various times over the past 21 years, our ongoing ORV management efforts have included:

- a trail ranger program in the Dredge Lakes area
- ORV maps and ORV signs posted at trailheads which have been repeatedly torn down and vandalized
- carsonite signs along the ORV area boundary within the Dredge Lakes area, designating closed and open ORV areas; these signs have been continually vandalized and stolen
- creation of numerous rock barriers, berms, or other barricades as a physical boundary between the designated ORV area and closed area; these have been vandalized or moved and new trails created to allow ORV's into closed areas
- numerous news releases sent to the media reminding motorized users of ORV and snowmobile use areas and regulations on the Juneau Ranger District
- repeated ORV user contacts and warnings from Forest Service personnel
- increased law enforcement patrols of the area

Even with these efforts, we have been unable to effectively manage ORV use in this area.

Approximately 3.6% of the Recreation Area is currently set aside for ORV use, however another 9.4% of the total area is affected by illegal ORV use. Out of the 514 reported illegal incidences in the Recreation Area documented over the last five years by the Forest Service, City and Borough of Juneau Police Department, and Alaska State Troopers, 101 incidents have involved use of ORV's operating in closed areas or illegally accessing the area. From March 1995 to March 1996 another 32 incidents involving illegal use of ORV's have occurred. This magnitude of illegal ORV use over the past twenty years, despite reasonable agency efforts to curtail it, is a primary factor in my decision.

Additional concerns relate to safety between motorized and non-motorized users, degradation of visitor experience, and resource damage that has occurred as a result of illegal ORV use. These also form a basis for my decision to exclude ORV use from the Recreation Area, except for winter use on Mendenhall Lake.

Providing for a high quality recreation experience (both for motorized users and non-motorized users) over an extended period of time is an overall goal. Having both motorized and non-motorized recreationists using the same portion of the Recreation Area has resulted in non-motorized user groups experiencing a low quality recreation experience. This degradation of recreation experience for non-motorized users was clear to us from the large number of public responses we received on this issue (see FEIS Chapter 4, Issue 1 - Motorized Recreation Use and FEIS Appendix C - Summary of Public Comment).

Motorized users' recreation experience is also negatively affected by the small area that is currently set aside for ORV use. During the ORV workshop held in January 1995, some ORV users clearly stated that the Dredge Lake area (207 acres) was not adequate to provide them with a high quality recreation experience and that was why many were recreating outside the designated ORV area. Like

other recreationists, they prefer Mendenhall Lake as a destination, with views of the glacier and access to the beaches. They also desire more miles of trail, an area to have jumps, an area to go "all out," and a variety of terrain to challenge different skill levels. Other ORV users, while stating that the area wasn't "perfect", still want to retain it for ORV use. Many users desired to have their own area with relatively few restrictions and no other users and felt that would make their experience a high quality one.

I understand ORV user expectations for relatively unrestricted use and desire for a high quality ORV experience. However, because of impacts to other users, and the impacts to natural resources and the special area values for which the area was originally set aside. The Recreation Area cannot provide unrestricted nor high quality opportunities for ORV riding. The area currently set aside, as well as the trails and areas set aside in Alternatives 3 and 4 of the EIS, are small and too limited to offer a diversity of ORV challenge levels that would meet most ORV user needs for a quality experience.

Resource damage from ORV use has also occurred. Approximately 14% of fish spawning areas in the Recreation Area are being negatively affected by ORV use. Shorebird habitat along Mendenhall Lake has been disturbed by illegal ORV use on lakeshore beaches. Vegetation is repeatedly damaged or destroyed by pioneer trails into both the open and closed areas. As a result of this illegal ORV use, habitat has been degraded and continues to be in over 13% of the Recreation Area.

Continued use of ORV's does not meet with the overall direction to protect the natural environment, especially in the Dredge Lakes Unit. However, because ORV and snowmobile use on ice and snow on the west side of frozen Mendenhall Lake does not cause damage to fish, wildlife or vegetation resources, and because user groups are relatively separated, I am deciding to continue this as an authorized use. We will also work with ORV and snowmobile users to reduce conflicts when they occur. If conflicts continue, I will consider amending this plan to exclude ORV use of this area also.

I considered alternatives that would continue ORV use in the area. Alternative 3 would provide a designated trail system, Alternative 4 would provide a smaller designated area, and Alternative 1 would continue the current situation. However, because of the terrain (few natural geographic barriers to separate the ORV use area from the non-ORV use area) and some ORV users disregarding boundaries or other users, any alternative that provides an ORV area would require continuous and intensive law enforcement effort for as long as the area were open to ORV use. The allocation of our limited law enforcement resources to that intensive effort is not something I can justify long term. By closing this area to ORV use, enforcement will be easier, and there will be a greater probability of success in addressing illegal ORV use. I recognize that closure of the Recreation Area to ORV use will require a commitment for at least a year to intensive education and law enforcement patrols, so that users know about its change to a closed area.

The decision to exclude ORV use was a difficult one because I know there are respectful, self-policing ORV users who will now lose one of the few local areas in Juneau they have had to ride in. I commit my staff in Juneau to be responsive in working with these users, other public land managers, and private and corporate landowners, to explore other options for ORV use in the Juneau area.

#### **Firearm Use**

Alternative 6 will allow for use of shotguns in the Dredge Lakes Unit during waterfowl and snowshoe hare hunting seasons. It will also allow shotgun and rim-fire .22 caliber rifle use in the Mt. McGinnis Unit during grouse and ptarmigan season.

I have selected this alternative because meets the desired future condition of managing principally for recreation use while retaining the area substantially in its natural condition. The Recreation Area provides a unique opportunity for local hunters to hunt waterfowl close to home without the access limitations associated with tidal areas, such as those that exist on the Mendenhall Wetlands. These attributes make the Recreation Area particularly important to young hunters. I distinguish this use

from the illegal use of pistols, rifles and other firearms for target practice in the Recreation Area which is a serious safety hazard to other users. Public concerns we heard about firearm use mostly related to illegal use, not legitimate use of firearms for hunting purposes.

One of the needs for revising the 1975 Area Management Plan was to reduce conflicts among recreational user groups and to reduce risk to public health and safety. During public scoping, both of these points have been raised regarding use of firearms for hunting in the Recreation Area. Most of the comments received were opposed to hunting in the area and focused on safety concerns. Shotgun pellets discharged during normal hunting conditions do not pose a significant safety threat to people who may be using the area for other than hunting purposes. Waterfowl hunting is a fall activity, and generally an early morning or evening event. During the fall, in early mornings and evenings, there are few other recreationists using the Dredge Lakes Unit. Very little snowshoe hare hunting currently occurs in the Recreation Area.

Rim-fire .22 caliber rifle bullets discharged during normal hunting conditions have a longer range. However, shots are generally taken of birds high in trees. These high angle shots do not pose significant safety concerns. Because of the remoteness of the terrain on Mt. McGinnis, and the relatively difficult access to this area, it is unlikely that large numbers of people would recreate in this area. Use of rim-fire .22 caliber rifles during ptarmigan and grouse season in the spring and fall does not pose a significant threat to other recreationists.

The use of firearms for hunting purposes is also consistent with maintaining the natural conditions of a revegetating glacial landscape, while balancing human recreation needs. Because of the state regulation prohibiting hunting within 0.25 miles of Mendenhall Lake and the City and Borough of Juneau ordinance prohibiting discharge of firearms within 0.5 miles of a road, there are currently only 58 acres available for legal hunting within the Dredge Lakes Unit. The Territorial Sportsmen have offered to work with the State to make better use of the Dredge Lakes area for hunters. To date, modifications have been made to the City and Borough of Juneau ordinance so that it now allows hunting on the Mendenhall Wetlands. I support the common sense approach to hunting regulations which ensures safety to adjacent residences, while also providing a high quality hunting experience.

Illegal use of firearms is also a matter of concern to me. There have been only nineteen reported incidences over the last five years involving illegal firearm use. However, because of public safety concerns, we will increase law enforcement patrols, have more cooperative education efforts with the city and state, and additional signing throughout the Recreation Area. I also commit my staff in Juneau to explore additional law enforcement options with city and state law enforcement officials.

### **Commercial Use**

Alternative 6 provides for managed commercial growth in designated areas within the Recreation Area. It also allocates a percentage of the total site capacities to commercial users (such as tour operators and outfitter/guides). Allocation of commercial use under Alternative 6 will be:

- 65% of capacity at the Visitor Center**
- 65% of capacity on Mendenhall Lake and Mendenhall River**
- 20% of capacity on East Glacier Trail**
- 20% of capacity on Nugget Creek Trail**
- 20% of capacity on West Glacier Trail**

The purpose for allocating commercial use levels in the Recreation Area is to develop a management approach that fairly allocates all, or a portion of, capacity to all user groups. With increased use and increased demand for commercial use in the Recreation Area, we are reaching points where negative impacts are beginning to occur (degradation of visitor experience, overcrowding, inability of facilities to accommodate use). Forest Service special area management direction allows use up to levels that do not interfere with the values for which the area was set aside nor negatively affect the visitor

experience (Forest Service Manual 2372.4). I have decided that pro-actively managing for increasing use in the Recreation Area best protects area values and visitor experience.

Total capacities were analyzed for the Visitor Center, for Mendenhall Lake and Mendenhall River, and for designated trails using two factors:

- 1) what type of recreation experience we are managing for at that site or in that particular area;
- 2) what physical space is currently available at that site/area and what, if any, limiting factors or constraints there might be.

This total capacity formed the basis to develop choices for a decision on how to allocate the available capacities between non-commercial and commercial users. The allocation percentages set forth above as part of Alternative 6 are the decisions I am making here.

It is important to us that there be an equitable distribution between commercial and non-commercial users. Since the 1980's, tourism has become a major industry in Southeast Alaska. Total visitation in Juneau from cruise ships has grown from 87,358 in 1982 to over 410,000 projected for 1996. (FEIS pp. 3-29). Industry projections indicate continued strong growth well into the next decade. Because of its dramatically attractive view of the Mendenhall Glacier and its accessibility in Juneau, the Mendenhall Glacier Visitor Center has also recently seen an increase in visitation from commercial tours, increasing 42% over a three year period, from 126,360 visitors per summer in 1992 to 179,750 visitors per summer in 1995.

With the increase in visitation, the Recreation Area, especially at the Mendenhall Glacier Visitor Center, has begun to experience crowding and its effects. The effects include inadequate capacity of facilities to accommodate use, some visitor degradation of experience, loss of the area's natural character, and public health and safety concerns.

I have selected this alternative to ensure that a high quality visitor experience is provided for all visitors, whether they are on commercial tours, an independent traveler, or a local visitor. One of the primary features of the Recreation Area is the natural setting and "wild" character of this recently deglaciated landscape. I want to ensure that these natural resource values and visitor experience are not diminished, and that existing and future non-commercial public use is not "crowded out" of the Recreation Area.

I also understand and support concerns by local officials and tour operators that opportunities for tourism growth continue to provide their important part in the local and regional economies. By allocating commercial use levels at 65% of capacity at the the Visitor Center and on Mendenhall Lake and River, and at 20% of capacity on designated trails, we are still providing ample room for commercial growth (see FEIS pgs. 4-21, 4-22, 4-24, 4-25, 4-29). These commercial growth opportunities will be even greater as we transition to a larger Visitor Center. Expansion of the Visitor Center will not only provide more commercial growth opportunities, but also increase capacity and increase visitor satisfaction levels.

Alternative 6 allows for an increase of 37% in commercial visitors to the Visitor Center and an increase in 48% of commercial visitors on Mendenhall River. There will also be new commercial use opportunities on Mendenhall Lake and on three trails, which will provide a substantial increase over existing use levels. Once the Visitor Center expansion project is completed, this alternative allows for an increase of 257% over existing use levels.

In making this decision, I considered that the current commercial use level is very close to 50% of capacity (see FEIS pp. 4-21). Alternative 5 would not have allowed for any growth of that use and Alternative 4 would have allowed only a slight increase above existing use levels. I also considered Alternative 3, which would have allowed commercial allocation levels at 75% of capacity. However, based on earlier studies for the Mendenhall Glacier Visitor Center expansion project, which determined that approximately 65% of visitors to the Visitor Center were cruise ship visitors, and 35% were

independent travelers and local residents, Alternative 6 best reflects the existing non-commercial use levels.

Commercial users have commented that we do not really know what the current level of non-commercial use is at various places within the Recreation Area. Because non-commercial users do not need to get permits, we do not have the detail of data that we do for commercial/permitted users. However, based on earlier studies for the Visitor Center expansion project, special use permit files, trail user survey data, and estimates of use at the Visitor Center, we know that non-commercial use is approximately 57,500 and most likely even higher. I believe that the Recreation Area can accommodate an increase in commercial use and still have capacity for an increase in non-commercial use, as well as providing a high quality visitor experience.

Some commercial users and local officials have also commented that commercial use allocation levels will result in a decrease in commercial opportunities. Not so, they allow growth. When projected out, and depending on industry growth rates, commercial use allocation levels will not be reached for another four to ten years at the existing Visitor Center and for seven to sixteen years on Mendenhall River. For Mendenhall Lake and on the three designated trails, where these allocation levels are smaller, commercial growth potential may be reached sooner, depending on demand. Once the Visitor Center expansion project is completed, commercial users will not reach 65% of capacity for another twelve to twenty years (see FEIS pg. 4-22).

It will also be very important for us to monitor future use in the Recreation Area under this decision and determine whether the commercial use allocations are meeting the goals they were designed for. This monitoring information will allow us to either verify that the allocations meet the goals or give us information to adjust them either up or down. With this decision, I direct my staff in Juneau to monitor and evaluate the data collected during the next ten seasons of use for all commercial and non-commercial uses allowed in the Recreation Area. Additional information will improve both the data base and future decisions about optimal capacity.

The following lists the commercial use allocation levels I am authorizing under Alternative 6. Commercial uses as described in Alternative 6 may be authorized for these designated areas only. Commercial use allocation levels are for May 15 - September 15 of each year and apply to the peak tourism season only. Commercial use may also occur at these designated areas outside of this high use period without falling within allocation levels as long as adverse impacts are not occurring.

#### **Visitor Center**

246,570 visitors per summer (average of 1,990 visitors per day).

#### **Visitor Center (once improvements are completed)**

462,190 visitors per summer (average of 3,730 visitors per day).

#### **Trails**

##### ***East Glacier Trail:***

5,950 visitors per summer (48 visitors per day; maximum group size of twelve, including guide(s); maximum of four groups per day).

##### ***Nugget Creek Trail:***

2,980 visitors per summer (24 visitors per day; maximum group size of twelve, including guide(s); maximum of two groups per day).

##### ***West Glacier Trail:***

4,220 visitors per summer (48 visitors per day; maximum group size of twelve, including guide(s); maximum of four groups per day; weekdays only; must stay on West Glacier Trail; commercial use on rock outcrop near Glacier prohibited).

Because existing data for trail use levels shows public use accounting for approximately 60% of use, commercial use levels are allocated at 20% of capacity so that there is room for growth for public use on these trails.

Additionally, to reduce potential conflicts between guided and non-guided users on the West Glacier Trail, and to meet the desired future condition of a Semi-Primitive recreation experience in the McGinnis Mountain Unit (except for the West Glacier Trail, which is Roaded Natural), Alternative 6 allows outfitter/guide hiking on West Glacier Trail on weekdays only. Commercial use of the rock outcrop near the Glacier is prohibited to ensure a Semi-Primitive recreation experience, to retain the natural visual setting viewed from the Visitor Center, and to reduce conflicts with local users.

**Mendenhall Lake**

2,980 visitors per summer (24 visitors per day; maximum group size of twelve, including guide(s); maximum of two groups per day; special use permit stipulations will include specified "minimum approach distances" to protect gull colony; commercial tour use/landings on the rock outcrop near the Glacier is prohibited).

**Mendenhall River**

38,190 visitors per summer (average of 308 visitors per day; maximum of four groups per day).

To meet the desired future condition of a Semi-Primitive recreation experience on Mendenhall Lake and River, a maximum of four commercial groups per day will be allowed on the River.

Under this alternative, commercial facilities, developments and concessions (such as recreational equipment rentals, food, beverage, and souvenir vendors, and photography concessions) will continue to be prohibited. My decision is consistent with the management direction outlined in the 1975 Management Plan, which also prohibits this use. I continue this prohibition for four reasons: 1) businesses already provide these services on private land within a short drive from the Recreation Area and in the local community; 2) concession type operations and commercial developments are not consistent with the overall management direction for providing a relatively undeveloped, natural setting, and a maximum contrast to urbanization; 3) concessions, commercial developments and facilities do not primarily provide interpretation or education of natural or glacial features, or cultural or historic values; and 4) concession type operations and commercial developments detract from the natural environment.

It is also my decision that the Plan allow consideration of operation and management of the Mendenhall Lake Campground by concession, and also the operation of the Mendenhall Glacier Visitor Center by a non-profit natural history/interpretive association, should the Juneau Ranger District decide to do so in the future. These types of commercial operations differ from concession and commercial development operations listed above in that they would operate and maintain existing facilities only. As federal budgets decrease, this decision will keep our options open to ensure that we continue providing quality service to the public.

**Access**

My selection of Alternative 6 provides for the maximum number of access points into the Recreation Area. This decision is consistent with the purpose and need to address conflicts among recreational user groups, and reduce the risks to public health and safety.

The following existing access points will be continued, with improvements as stated in Alternative 6:

- Visitor Center parking lots
- Gladstone Avenue Trailhead (no improvements to be made)

- Dredge Lake Road Trailhead
- Back Loop Bridge Trailhead
- West Glacier Trailhead

The following are new access points that could be constructed, pending further site specific environmental analysis and approval:

- Administrative Site Trailhead (old FAA site)
- Glacier Spur Road Trailhead
- Emergency river rescue access (near Back Loop Bridge)

Additionally, pending further site specific environmental analysis, the City and Borough of Juneau could also be authorized easements for five emergency and maintenance vehicle turnarounds on National Forest System lands adjacent to five neighborhoods bordering the Recreation Area. These would be considered for Dredge Lake Road, Terrence Place, Gladstone Street (west and east), and Trafalgar Avenue.

Conflicts will be reduced between users and adjacent residents by allowing construction of two new trailheads away from residential neighborhoods (see FEIS, page 4-41). This will help disperse users and reduce the number of users who access the Recreation Area through residential neighborhoods. While I know that some residents would prefer complete closure of some trailheads adjacent to their neighborhoods, these are traditionally used and offer easy access to the southern portion of the Recreation Area and I have selected Alternative 6 to keep them open. With the elimination of ORV access at these trailheads and ORV use in the Dredge Lakes Unit, I believe conflicts between users and adjacent residents will be reduced. We will also continue cooperative law enforcement to deter illegal activities such as parties after closure hours, vandalism, and dumping at all access points into the Recreation Area. That way we can meet both legitimate user needs and local residents' desires.

The additional access for emergency river rescue will increase public health and safety by expediting swift water rescue efforts on the Mendenhall River. The City and Borough of Juneau Fire Department told us that existing access points do not provide quick enough response times in an emergency situation. Alternative 6 addresses this concern for improved efforts to increase public health and safety on the River.

It is also my decision to allow dispersed, undeveloped overnight use in the Recreation Area on McGinnis Mountain, facilitating cross-country mountaineering, hiking and hunting activities. This meets direction to be "protecting natural resource values while balancing natural resource use with human recreation needs". Resource values and other visitors' recreation experiences are also protected by allowing this use only on a dispersed, undeveloped site basis, and at a minimum of 100 yards northwest of the West Glacier Trail (no overnight use is allowed on the rock outcrop near the Glacier or beaches on Mendenhall Lake).

I am also authorizing public access behind an existing gate currently reserved by a special use permit holder at Mendenhall Lake. This gate may still remain, however, I am also authorizing public access to the launch area for non-motorized recreational boating. While some conflicts may occur between special use permit holders and the public, we will work with both groups to address concerns and to ensure lake access.

### **Fish and Wildlife**

The overall direction for the Recreation Area is to retain the area substantially in its natural condition, while balancing natural resource use with human recreation needs. My decision to select Alternative 6 supports this direction by placing emphasis on:



- fish and wildlife viewing
- implementing additional protective measures if negative impacts are detected
- requiring dogs to be on a leash while on the south and east shores of the lake from April 15 through July 15
- consideration of new fish and wildlife enhancement projects.

In addition to the measures contained in previous decisions that authorized construction of the Steep Creek Salmon Viewing Trail and an interpretive trail emphasizing wildlife viewing in the Mendenhall Lake Campground, new measures to protect wildlife resources include:

- special use permit stipulations for commercial use (ethical wildlife viewing; specific approach distances for boat tours; rock outcrop near Glacier closed to commercial use)
- continued cooperative efforts with the State of Alaska regarding recreational trapping closure, Mt. Bullard goat hunting closure, and Steep Creek fishing closure.

The main fish and wildlife resource concerns are for the gull colony on the rock outcrop on the west side of the Glacier, the shorebirds and Arctic terns that nest along the shores of Mendenhall Lake, and the spawning salmon and trout throughout the Recreation Area. Because the gull colony is unique to the area, it is a valuable resource. Currently, there is minimal human use in this area and human disturbance does not appear to be negatively affecting the colony. However there is increased interest from commercial users who want to provide new hiking and boating tours to this site. Protection measures for the colony include prohibiting use of the rock outcrop by commercially guided hikes on the West Glacier Trail, designating areas where clients can be off-loaded while on commercial boat trips, and designating how close commercial boat tour operators can take their boats to the colony. If human use patterns change and the gull colony begins to be affected, additional protective measures can be taken.

Various species of shorebirds as well as Arctic terns are likely being impacted in the Recreation Area. The most critical impacts result in nest disturbance and likely nest failure due to harassment. The south and east shores of Mendenhall Lake appear to contain better habitat and are used more heavily by these bird species than the west shore. For this reason, and because more people use the south and east shores, we will implement a "dogs on leash policy" on the south and east shorelines from April 15 through July 15. This, along with an elimination of ORV use of the south shore, should reduce impacts. We will attempt to evaluate the success of these measures and may implement additional protective measures if deemed necessary. We will monitor the success of these measures and may adjust protective measures if necessary. We will also work to raise user awareness of impacts they may be having on these species.

Alternative 5 would provide more immediate protection to the area's fish and wildlife resources but it would also restrict more human recreational opportunities. I feel that it is important to use complete area closures only as a last resort, particularly on the south and east shores of Mendenhall Lake. These areas are very important to local as well as out of town visitors. As stated in Alternative 6, we will always have the opportunity to provide further protection if the measures in Alternative 6 do not satisfactorily protect the area's fish and wildlife resources.

## **Public Involvement**

Public involvement for revision of the 1975 Management Plan was initiated in May 1993 through a series of mailings and public meetings. Approximately 250 letters were sent, and approximately 100 people attended public meetings. This first phase of public involvement provided substantial input in formulation of the Proposed Action.

Public scoping on the Proposed Action began in November 1994 with publication of a Notice of Intent in the Federal Register, and with news releases and publication of a full page newspaper insert in the *Juneau Empire*. A letter notifying the public of the proposed changes to the existing management plan was also mailed to 320 people. Two public "open houses" were held, which were attended by about 100 people. In addition, the Forest Service sponsored a one day workshop, (two four hour sessions) specifically to discuss ORV use. The workshop was attended by 45 people. Interviews were also held with local news media.

The Draft Environmental Impact Statement (DEIS) was mailed to over 500 interested individuals, agencies and organizations for public review in October 1995, with comments requested by November 17, 1995. During this time, a front page article in the *Juneau Empire* was published and interviews made with local radio stations. In addition, two display ads and two legal notices announcing the availability of the DEIS were published in the *Juneau Empire*. At the conclusion of the public comment period, 45 letters and numerous personal and telephone contacts had been received.

Additional description of the public involvement process is in the FEIS, Appendix D - Summary of Public Involvement.

## **Mitigation and Monitoring**

Included in this decision is implementation of the mitigation and monitoring requirements listed for Alternative 6 in the FEIS (see FEIS, Chapter 2, section G).

Additionally, as a mitigation measure to reduce conflicts between commercial users and local users, the following special use permit stipulations may be considered for all outfitter/guide special use permits in the Recreation Area:

Outfitter/guide hiking on East Glacier, Nugget Creek and West Glacier trails between 8 am - 6 pm only.

Outfitter/guide boat tours on Mendenhall River between 8 am - 8 pm only.

Outfitter/guide boat tours on Mendenhall Lake between 8 am - 8 pm only.

If monitoring shows that conflicts between commercial users and non-commercial users are still occurring, additional special use permit stipulations (i.e., scheduled tour departure times, etc.) may be considered.

## **Findings Required by Other Laws**

### **Tongass Land Management Plan, as Amended**

The Tongass Land Management Plan calls for this area to be managed as outlined in the approved Mendenhall Glacier Recreation Area Management Plan. This decision is consistent with the Tongass Land Management Plan, as amended. The site is located in Management Area C06 - Juneau, and is allocated as Land Use Designation (LUD) III - Special Area. Under LUD III, the lands will be managed for a variety of uses. The emphasis is on managing use and activities in a compatible and complementary manner to provide the greatest combination of benefits. These areas either have high use or high amenity values. Allowances in calculated potential timber yield have been made to meet multiple objectives. These lands may include concentrated recreation developments.

### **ANILCA Section 810, Subsistence Evaluation and Finding**

As required by Section 810 of ANILCA, the effect of this programmatic plan on subsistence has been evaluated in terms of a) subsistence uses and need; b) availability of other lands; and c) other

alternatives. The effects of this programmatic plan does not present a significant possibility of significantly restricting subsistence uses. Therefore, it is my determination that this decision will not cause a significant restriction of uses or resources.

**Coastal Zone Management Act of 1972, as amended**

The Coastal Zone Management Act requires the Forest Service, when conducting or authorizing activities or undertaking developments directly affecting the coastal zone, to ensure that the activities or the development be consistent with the approved Alaska Coastal Management Plan to the maximum extent practicable. A review of the Juneau Coastal Management Plan, as well as a review of the Alaska Coastal Management Plan, and a review of input from, and comments by, both the State and the City and Borough of Juneau indicates no inconsistencies with either the Alaska Coastal Management Plan or the Juneau Coastal Management Plan. Therefore, I have determined that the proposed activities in Alternative 6 are consistent with the enforceable policies of the Alaska Coastal Management Plan to the maximum extent practicable in accordance with the Coastal Zone Management Act.

**Endangered Species Act of 1973**

A biological evaluation has been completed for this action which indicates that no federally listed threatened or endangered species will be affected by this decision.

**National Historic Preservation Act of 1966**

The Forest Service program for compliance with the National Historic Preservation Act includes locating, inventorying and nominating all cultural sites that may be directly or indirectly affected by scheduled activities. Management direction in this programmatic plan has been reviewed and a determination made that no known cultural resources are present in the project area that would be negatively affected by this decision.

**Floodplain Management (E.O. 11988), and Protection of Wetlands (E.O. 11990)**

This decision allocates recreation uses in a programmatic manner. It does not specify developments which would occur within a floodplain as defined by Executive Order 11988 or within wetlands as defined in Executive Order 11990. Future developments, if any, would, on a site specific basis, determine effects, if any, on floodplains and wetlands as required by executive order.

## **Implementation Date**

Implementation of decisions made by the Chatham Area Forest Supervisor, Gary Morrison, which are subject to appeal pursuant to 36 CFR part 217, may not occur for seven calendar days following publication of legal notice of the decision in the *Juneau Empire* newspaper, published in Juneau, Alaska.

## **Right to Administrative Review**

This decision is subject to administrative review (appeal) pursuant to 36 CFR Part 217. A written notice of appeal, *in duplicate*, must be filed with the Reviewing Officer within 45 days of publication of notice of this decision in the *Juneau Empire*. The Reviewing Officer is:

Phil Janik, Regional Forester  
Regional Office  
P.O. Box 21628  
Juneau, Alaska 99802-1628

In accordance with 36 CFR Section 217.9, it is the responsibility of those who appeal a decision to provide the Reviewing Officer sufficient evidence and argument to show why the decision by the lower level officer should be changed or reversed.

At a minimum, the written notice of appeal filed with the Reviewing Officer must:

1. State that the document is a Notice of Appeal filed pursuant to 36 CFR part 217.
2. List the name, address, and telephone number of appellant.
3. Identify the decision about which the requestor objects.
4. Identify the document in which the decision is contained by title and subject, date of the decision, and name and title of the Deciding Officer.
5. Identify specifically that portion of the decision document to which the requestor objects.
6. State the reasons for objection, including issues of fact, law, regulation, or policy and, if applicable, specifically how the decision violates the law, regulation, or policy.
7. Identify the specific change(s) in the decision that the appellant seeks.

Pursuant to 36 CFR 217.10 requests to stay approval of this Forest Plan amendment may not be granted.

**Contact Person**

Joni Packard  
Interpretive Services Staff Officer  
Juneau Ranger District  
(907) 586-8800



GARY A. MORRISON  
Forest Supervisor

April 4, 1996

## Table of Contents

SUMMARY	PAGE
Purpose and Need	S-1
Purpose	S-1
Need	S-1
Desired Future Condition	S-1
Public Involvement	S-2
Significant Issues	S-3
Issue 1: Motorized Recreational Vehicle Use	S-3
Issue 2: Firearm Use	S-3
Issue 3: Commercial Use	S-4
Issue 4: Access	S-4
Issue 5: Fish and Wildlife	S-4
Alternatives	S-4
Comparison of Alternative by Component (Table S-1)	S-5
Affected Environment	S-9
Environmental Consequences	S-9
Issue 1: Motorized Recreational Vehicle Use	S-9
Issue 2: Firearm Use	S-11
Issue 3: Commercial Use	S-12
Issue 4: Access	S-15
Issue 5: Fish and Wildlife	S-17

CHAPTER 1 - PURPOSE AND NEED FOR ACTION	PAGE
A. Introduction	1-1
Background	1-1
Area Location	1-1
Desired Future Condition	1-3
B. Purpose and Need	1-3
C. Proposed Action	1-3
D. Decision To Be Made	1-4
E. Public Involvement	1-5
F. Significant Issues	1-6
Issue 1 - Motorized Recreational Vehicle Use	1-6
Issue 2 - Firearm Use	1-6
Issue 3 - Commercial Use	1-7
Issue 4 - Access	1-7
Issue 5 - Fish and Wildlife	1-7
G. Non-Significant Issues	1-7
1. Horse Use	1-7
2. Dogs	1-8
3. Garbage Dumping	1-8
4. Mendenhall River Bridge	1-8
5. Juneau District Administrative site	1-8
6. Mendenhall Lake Campground	1-8
7. Trails	1-8
8. Visitor Center	1-9
9. Mendenhall Glacier and Mendenhall Lake and River Use	1-9
H. Existing Management Direction	1-9
I. Other Laws and Regulations	1-10
U.S Army Corp of Engineers	1-10

U.S. Fish and Wildlife Service	1-10
National Historic Preservation Act (1986)	1-10
Alaska Division of Governmental Coordination	1-10
Alaska Department of Fish and Game	1-11
Alaska State Hunting Regulations	1-11
City and Borough of Juneau	1-11

<b>CHAPTER 2 - ALTERNATIVES</b>	<b>PAGE</b>
A. Introduction	2-1
B. Clarification of the No Action Alternative the Proposed Action, and the Preferred Action	2-1
C. Formulation of Alternative	2-2
D. Alternative Considered in Detail	2-2
Common to All Alternatives	2-2
Common to Alternatives 2, 3, 4, and 6	2-3
Common to All Alternatives Except Alternative 1	2-4
Alternative 1 - No Action	2-6
Alternative 2 - Proposed Action	2-9
Alternative 3	2-11
Alternative 4	2-14
Alternative 5	2-17
Alternative 6	2-19
E. Comparison of Alternatives	2-22
By Component	2-23
F. Comparison of Impacts	2-27
Issue 1: Motorized Recreational Vehicle Use	2-27
Issue 2: Firearm Use	2-29
Issue 3: Commercial Use	2-29
Issue 4: Access	2-33
Issue 5: Fish and Wildlife	2-34
G. Mitigation and Monitoring	2-35
H. Enhancement Opportunities	2-36

<b>CHAPTER 3 - AFFECTED ENVIRONMENT</b>	<b>PAGE</b>
A. Introduction	3-1
B. Soils and Wetlands	3-1
C. Water	3-4
D. Vegetation	3-4
E. Fisheries	3-5
F. Wildlife	3-7
G. Existing Access	3-10
H. Recreation	3-12
I. Law Enforcement	3-26
J. Commercial Uses and Tourism	3-29
K. Environmental Education	3-33
L. Social/Human Environment	3-34
M. Subsistence	3-35

## Table of Contents

<b>CHAPTER 4 - ENVIRONMENTAL CONSEQUENCES</b>	<b>PAGE</b>
A. Introduction	4-1
B. Issue 1 - Motorized Recreational Vehicle Use	4-1
Common to all Alternatives	4-1
Alternative 1 - No Action	4-2
Alternative 2 - Proposed Action	4-5
Alternative 3	4-7
Alternative 4	4-9
Alternative 5	4-11
Alternative 6	4-12
C. Issue 2 - Firearm Use	4-12
Common to all Alternatives	4-12
Alternative 1 - No Action	4-12
Alternative 2 - Proposed Action	4-13
Alternative 3	4-13
Alternative 4	4-14
Alternative 5	4-14
Alternative 6	4-14
D. Issue 3 - Commercial Use	4-14
Common to all Alternatives Except Alternative 1	4-14
Alternative 1 - No Action	4-16
Alternative 2 - Proposed Action	4-19
Alternative 3	4-26
Alternative 4	4-30
Alternative 5	4-34
Alternative 6	4-36
E. Issue 4 - Access	4-37
Alternative 1 - No Action	4-38
Alternative 2 - Proposed Action	4-39
Alternative 3	4-40
Alternative 4	4-41
Alternative 5	4-41
Alternative 6	4-41
F. Issue 5 - Fish and Wildlife	4-41
Common to all Alternatives	4-41
Alternative 1 - No Action	4-42
Alternative 2 - Proposed Action	4-44
Alternative 3	4-45
Alternative 4	4-46
Alternative 5	4-47
Alternative 6	4-48
G. Other Resources	4-48
Cultural and Historic Resources	4-48
Wetlands and Floodplains	4-49
Vegetation	4-49
H. Subsistence	4-50
I. Cumulative Effects	4-50
J. Irreversible and Irretrievable Commitment of Resources	4-51

<b>CHAPTER 5 - LIST OF PREPARERS</b>	<b>PAGE</b>
--------------------------------------	-------------

Members of Interdisciplinary Team

5-1

<b>APPENDICES</b>	<b>PAGE</b>
-------------------	-------------

Appendix A  
FEIS Response to Public Comments

A-1

Appendix B  
List of Agencies, Organizations and Individuals  
Receiving Copies of the Final EIS

B-1

Appendix C  
Existing Management Direction

C-1

Appendix D  
Public Involvement

D-1

Appendix E  
Recreation Opportunity Spectrum

E-1

Appendix F  
List of Acronyms

F-1

Appendix G  
List of References

G-1

<b>LIST OF TABLES</b>	<b>PAGE</b>
-----------------------	-------------

Table 2-1  
Comparison of Alternatives by Component

2-23

Table 3-1  
Summary of Fish Use in the Recreation Area

3-6

Table 3-2  
Summary of Use in the Recreation Area

3-14

Table 3-3  
Trail Maintenance Levels

3-19

Table 3-4  
Trails within the Mendenhall Glacier Recreation Area

3-20

Table 3-5  
Mendenhall Glacier Recreation Area Trail Comparison

3-21



## Table of Contents

Table 3-6 Location of Incidents (1990-1995)	3-27
Table 3-7 Major Reported Incidences by Type and Location	3-28
Table 3-8 Outfitter/Guide Tours to Visitor Center 1992-1995	3-31
Table 3-9 Approved Commercial Special Uses	3-32
Table 3-10 Requests for New Commercial Use in the Recreation Area	3-33
Table 4-1 Summary of Commercial Use Allocation - All Alternatives	4-15

LIST OF GRAPHS	PAGE
Graph 3-1 Commercial Tour Use Levels in the Recreation Area	3-30
Graph 4-1 Opportunities for Commercial Use by Alternative - Visitor Center	4-21
Graph 4-2 Potential Commercial Use Growth - Visitor Center	4-22
Graph 4-3 Potential Commercial Use Growth - Expanded Visitor Center	4-22
Graph 4-4 Opportunities for Commercial Use by Alternative	4-24
Graph 4-5 Potential Commercial Use Growth - Mendenhall River	4-25
Graph 4-6 Potential Commercial Use Growth - Mendenhall Lake	4-25
Graph 4-7 Potential Commercial Use Growth - Trails	4-29

LIST OF MAPS	PAGE
Map 1 Mendenhall Glacier Recreation Area	1-2
Map 2 Mendenhall Lake and Mendenhall River Commercial Use	2-5

Map 3 Alternative 1 - No Action	2-7
Map 4 City and State Restrictions on Firearm Discharge and Hunting within the Recreation Area	2-8
Map 5 Alternative 2 - Proposed Action	2-10
Map 6 Alternative 3	2-13
Map 7 Alternative 3 - CBJ Emergency Vehicle Turnarounds	2-15
Map 8 Alternative 4	2-16
Map 9 Alternative 5	2-18
Map 10 Alternative 6	2-21
Map 11 Ponds in the Glacial Outwash Area South of Mendenhall Lake	3-2
Map 12 100 Year Flood Events in the Recreation Area	3-3
Map 13 Shorebirds, Arctic Tern, and Gull Nesting Sites	3-9
Map 14 Existing Access Points to the Recreation Area	3-11
Map 15 Major Developed Trails within the Recreation Area	3-18
Map 16 Area that is Currently Receiving Illegal ORV Use	3-24
Map 17 Mendenhall Lake Area Open to ORV and Snowmobile Use in Winter for All Alternative Except Alternative 5	4-4

## Summary

### Purpose and Need

#### Purpose

The purpose for revising the 1975 Management Plan is to develop a management strategy which provides more specific management direction for the Recreation Area, addresses conflicts among recreational user groups, reduces risks to public health and safety, and protects the natural resources of this special area.

The management strategy for revising the 1975 Management Plan is purposely broad to provide for flexibility in responding to future changing uses in the area. The goal of management is not to increase satisfaction of all users, but instead, to provide satisfactory recreational experiences of a certain type, as defined by ROS class, in the Recreation Area. Because of the complexity of uses and demands, the Management Plan is intended to provide the framework for more pro-active decision making for problems and new opportunities that may occur in the foreseeable future.

#### Need

Since 1975, public use patterns and values regarding management of the Recreation Area have changed. Use has increased with the growth of the tourism industry and population growth in the Mendenhall Valley. Conflicts have steadily increased among off-road vehicle (ORV) users, hikers, bicyclists, and horseback riders. In particular, there is a need to resolve public concerns related to discharge of firearms and use of ORV's within the Recreation Area. Additionally, chronic vandalism, illegal dumping of garbage, late night parties, and excessive noise continue to be problems. There is also a need to address concerns regarding resource damage from recreational uses.

### Desired Future Condition

The Forest Service's overall management goal for the Recreation Area is to manage it principally for recreation use while retaining the area substantially in its natural condition. Primary emphasis is to be placed on protecting natural resource values while balancing natural resource use with human recreation needs.

The agency's overall vision for the Recreation Area is for the area to remain relatively undeveloped, allowing for concentrated use at two specific sites (the Visitor Center and Mendenhall Lake Campground), moderately concentrated use at three sites (West Glacier Trailhead, Skater's Cabin, and Mendenhall River), and managing for dispersed, low to moderate use in the rest of the Recreation Area.

The recreation opportunities to be provided are intended to give visitors a chance to experience the Mendenhall Glacier and the glacial landscape "up close," yet not adversely impact the natural resources of the area. For local and out-of-town visitors alike, this area offers a unique opportunity to experience a glacier and the rebirth of a glacial landscape without being in a wilderness setting.

The goal is to ensure both high quality recreation experiences and a healthy ecosystem that can provide for and sustain these high quality recreation experiences over an extended time.

## **Public Involvement**

Public involvement for the Mendenhall Glacier Recreation Area Plan revision was first initiated in May 1993, when the agency solicited public comment on the preliminary issues to be addressed in the revision of the 1975 Management Plan. Approximately 250 letters were sent to various individuals, agencies, and organizations. Three public meetings were held with approximately 100 people attending. A front page article in the *Juneau Empire*, public service announcements, and interviews with local radio stations also notified the public of the process to revise the 1975 Management Plan.

In addition to comments from the public meetings, 79 written and phone comments from individuals, organizations and agencies, and a petition from an adjacent homeowners group were received by the Juneau Ranger District during this period in 1993.

After reviewing public comment on the issues to be addressed in the revision to the 1975 Management Plan, the Draft 1995 Management Plan was formulated and sent out for public comment as the Proposed Action in November 1994.

Public scoping for the management plan revision began November 1994, with publication of a Notice of Intent for this Environmental Impact Statement (EIS) in the Federal Register. Public scoping efforts included news releases and the publication of a full page newspaper insert in the *Juneau Empire*, followed by 320 letters sent to various individuals, agencies, and organizations requesting public comment on the plan. Two public "Open Houses" were held, with approximately 100 people attending. In January 1995, the Forest Service also sponsored a one day workshop (two 4-hour sessions) where people could specifically discuss ORV use in the Recreation Area. Letters notifying the public of this workshop were sent out and interviews were held with the local news media. This workshop was attended by 45 people.

At the end of this public scoping period on the Proposed Action, 138 comments and three petitions had been received by the Juneau Ranger District.

On October 2, 1995, the Draft Environmental Impact Statement (DEIS) was mailed out for public review, with a 45 day comment period that lasted until November 17, 1995. Approximately 514 copies of the DEIS were mailed to interested people, organizations and agencies, as well as the local, state and university libraries. On October 8, 1995, a front page article appeared in the *Juneau Empire*. Interviews were also conducted with KTOO, KJNO, and KINY radio. At the conclusion of this public comment period, 45 comments were received. Copies of these letters and agency responses to these comments are found in Final Environmental Impact Statement (FEIS) Appendix A, Response to Public Comments.

A Notice of Intent for this EIS was placed in the Federal Register in November of 1994. The Federal Register is read by a large number of individuals, both nationally and internationally. Although national and international visitors to the Recreation Area were not contacted directly during scoping, a large number of companies who do business with these visitors were contacted. Twelve of these companies responded with detailed comments to the DEIS. It is believed that these responses, which account for approximately one quarter of all of the responses on the DEIS, adequately represent national and international visitors who are the clients of the respondents. Additional responses were received from the City and Borough of Juneau, Ducks Unlimited, and Juneau Convention and Visitors Bureau. These organizations also represent local, regional, national, and international interests.

For more information on the public involvement process, please see FEIS Appendix D, Summary of Public Involvement.

## **Significant Issues**

The initial public comments from 1993 were sorted and grouped into similar categories, then analyzed to determine if there were any significant issues. These preliminary significant issues were identified and used to develop the changes to the 1975 Management Plan, resulting in the Proposed 1995 Management Plan that was presented as the Forest Service Proposed Action for public scoping in November 1994.

Public comments received during scoping between November 1994 and January 1995, were sorted and grouped into similar categories, and analyzed to determine the issues. From these public comments, and from the initial analysis of public comment received in 1993, the following were determined to be significant issues to be addressed in this EIS.

### **Issue 1. Motorized Recreational Vehicle Use.**

This issue reflects public concern for safe use of trails by non-motorized recreationists as well as concern by recreationists who use motorized vehicles that they be allowed to continue these uses. ORV generated noise and resource damage are also components of this issue.

Concerns expressed by the public include not feeling safe in areas where ORV's are operating due to speed, noise, and the lack of courtesy by some motorized users. The un-regulated ORV use in the Dredge Lakes Unit of the Recreation Area is causing deteriorating experiences and resource damage such as soil rutting, vegetation loss, and silting of streams and ponds.

Other motorized recreational vehicle uses to be considered include motorized boat use on Mendenhall Lake, flying of model airplanes, and winter use of snowmobiles. Those who fly model airplanes have expressed their desire for this use to continue.

Comments reflect public opinion that the user conflicts are a result of poor law enforcement, that this is the only legal place left for motorized recreationists to operate in the Mendenhall Valley, that only a small group of people are causing the conflicts, and that this is a good area for families to bring their children to teach them skills in proper equipment use.

This issue will be evaluated based on designated ORV acres and miles of trail available for this use both within the Recreation Area and in the Juneau area.

### **Issue 2. Firearm Use.**

This issue reflects public concern for the safety of people recreating in an area where firearms are being discharged, as well as concerns for continuing opportunities for use of firearms during hunting season.

Some people expressed concerns for their safety while recreating in areas where firearms are being discharged. Residents living along the forest boundary have concerns about stray bullets.

There are others who support continuing opportunities for those who have traditionally hunted grouse, ducks, and snowshoe hares in the Recreation Area.

This issue will be evaluated based on the following items: a discussion on safety for each alternative; opportunity for similar hunting experiences in other areas close to the Mendenhall Valley; and acres of habitat suitable for grouse, ducks, and snowshoe hares within the Recreation Area.

### **Issue 3. Commercial Use.**

This issue reflects public concern that the amount of authorized commercial uses (outfitter/guide ventures) is negatively affecting the recreational experience for non-commercial users. On the other hand, there is also increased demand for more commercial use at the Visitor Center as well as throughout the entire Recreation Area.

This issue will be evaluated based on the following items: the current and future capacity limits at the Visitor Center, based on facility capacity designs; what the visitor should expect per Recreation Opportunity Spectrum (ROS) class for the Visitor Center, trails, and Mendenhall Lake and River; the effect on visitors of a range of commercial use levels; the effect on business opportunities; and projected commercial growth opportunities and when commercial use allocation levels would be reached.

### **Issue 4. Access.**

This issue reflects public concern that there is an inadequate distribution of access points into the Recreation Area. Some interests want to increase search and rescue access to the Mendenhall River and also increase parking options along main travel routes. Other users want to eliminate recreational access through residential areas.

This issue will be evaluated based on the following items: the number and type of access points; proximity of access point to residential areas; the need to provide special access to the Mendenhall River for river rescue operations; and hours that areas would be kept open for public use.

### **Issue 5. Fish and Wildlife.**

This issue reflects public concern for protection of fish and wildlife habitat from recreation activities. The main impacts to fish and wildlife resources within the Recreation Area are human disturbance and physical habitat alteration resulting from facilities and trail development. The wildlife species of most concern include gulls, shorebirds, terns, migratory songbirds, and anadromous fish.

This issue will be evaluated based on the following items: types and levels of recreation activities that become detrimental to wildlife species in the Recreation Area; acres of habitat impacted per species or group; and hunting and fishing opportunities.

## **Alternatives**

Six alternatives, including the Proposed Action and No Action alternatives were considered.

Table S-1. Comparison of Alternative by Component

Issue	Alternative 1 No Action	Alternative 2 Proposed Action	Alternative 3	Alternative 4	Alternative 5	Alternative 6
<b>Motorized Recreation Vehicle Use</b>	ORV and snowmobile use on west side of Mendenhall Lake when frozen; ORV and snowmobile use in Mendenhall Campground; ORV and snowmobile use in Dredge Lakes Unit; model airplane use allowed without vegetation removal; motorized boats allowed on west side of Mendenhall Lake with no developed access.	ORV's prohibited, except for ORV and snowmobile use allowed on west side of Mendenhall Lake when frozen; ORV and snowmobile use in campground prohibited except for administrative use; model airplanes and motorized boats same as Alt. 1.	ORV and snowmobile winter use on west side of Mendenhall Lake when frozen and on designated ORV trails; ORV and snowmobile winter use in campground same as Alternative 2; ORV permit required; model airplanes same as Alt. 1; motorized boat use only on west side of Mendenhall Lake and River with "no wake" rule; airboats, jet skis, jet boats and hovercraft not allowed.	ORV and snowmobile winter use on west side of Mendenhall Lake when frozen and in ORV area; ORV and snowmobile winter use in Mendenhall Campground same as Alternative 2; designated ORV area in Dredge Lakes Unit accessed from Glacier Spur Road; ORV permits required; model airplanes same as Alt 1; no motorized boats on Mendenhall Lake and on Mendenhall River within the Recreation Area.	Closed to all motorized recreational vehicle use including ORV's, snowmobiles, model airplanes and motorized boats.	ORV and snowmobile use same as Alternative 2; ORV and snowmobile winter use same as Alternative 2; model airplanes use same as Alt. 1; motorized boat use same as Alternative 4.

## Summary

**Table S-1. Comparison of Alternative by Component (continued)**

Issue	Alternative 1 No Action	Alternative 2 Proposed Action	Alternative 3	Alternative 4	Alternative 5	Alternative 6
<b>Firearm Use</b>	McGinnis Mtn. open; Moraine Lakes Unit open - shotguns allowed during waterfowl, snowshoe hare, ptarmigan, and grouse seasons.	All units closed.	McGinnis Mtn. open; Dredge Lakes Unit open; shotguns allowed during waterfowl, snowshoe hare, ptarmigan, and grouse seasons.	McGinnis Mtn. Unit open during ptarmigan and grouse season for shotguns and rim-fire .22 caliber rifles.	All units closed.	McGinnis Mtn. open during ptarmigan grouse season for shotgun and rim-fire .22 caliber rifles; Dredge Lakes Unit open during waterfowl, snowshoe hare, ptarmigan, and grouse seasons for shotguns only.
<b>Commercial Use</b>	Identify uses not compatible with area values; no commercial concession facilities allowed; no commercial allocation use levels established; outfitter/guide tours allowed on a case-by-case basis.	Criteria established for SUPs; no commercial concession facilities; commercial allocation levels established at 65% of capacity at Visitor Center, and on Mendenhall Lake and River; other outfitter/guide requests for commercial use on trails allowed only on case-by-case basis as determined by NEPA analysis.	Criteria established for SUPs; commercial concession facilities allowed on a case-by-case basis; commercial allocation levels established at 75% of capacity for the Visitor Center, and for Mendenhall Lake and River; outfitter/guide hiking tours allowed on East Glacier, West Glacier and Moraine Ecology trails at 20% of capacity.	Criteria established for SUPs; no commercial concession facilities; commercial allocation levels established at 50% of capacity for Visitor Center, and on Mendenhall Lake and River; outfitter/guide hiking tours allowed on East Glacier and Nugget Creek trails at 20% of capacity.	Criteria established for SUPs; commercial allocation levels established at 1995 levels for Visitor Center and on Mendenhall Lake and River; outfitter/guide hiking tours limited to 1995 levels.	Criteria established for SUPs; no commercial concession facilities; commercial allocation levels established at 65% of capacity for Visitor Center, and Mendenhall Lake and River; outfitter/guide hiking tours allowed on East Glacier, West Glacier and Nugget Creek trails with commercial allocation levels at 20% of ROS capacity; hiking tours on West Glacier Trail weekdays only.



Table S-1. Comparison of Alternative by Component (continued)

Issue	Alternative 1 No Action	Alternative 2 Proposed Action	Alternative 3	Alternative 4	Alternative 5	Alternative 6
<b>Access</b>	West Glacier Trailhead, Back Loop Bridge Trailhead, Dredge Lake Road Trailhead, and parking lots near Visitor Center; Recreation Area closed from midnight to 6 a.m. except for Mendenhall Lake Campground.	Same as Alt. 1 plus; consider emergency access to Mendenhall River by Back Loop Bridge; upgrade Back Loop Bridge Trailhead; consider construction new trailheads near Administrative site and Glacier Spur Road; Recreation Area closed from midnight to 6 a.m. except for Mendenhall Lake Campground.	Same as Alt. 2 except that Administrative Site and Glacier Spur Road trailheads would also allow ORV access; ORV access eliminated at Back Loop Bridge Trailhead and at Dredge Lake Road Trailhead; consider 5 CBJ easements; boat users allowed access through gate at Mendenhall Lake; Recreation Area closed from midnight to 6 a.m. except for Mendenhall Lake Campground and McGinnis Mountain which allows overnight camping.	Same as Alt. 2 except that Administrative site and Glacier Spur Road trailheads would also allow ORV access; ORV access eliminated at Back Loop Bridge Trailhead and at Dredge Lake Road Trailhead.	Same as Alternative 1 except close Dredge Lake Road Trailhead to all access.	Same as Alt. 3 except no ORV access at Administrative Site and Glacier Spur Road trailheads.

## Summary

**Table S-1. Comparison of Alternative by Component (continued)**

Issue	Alternative 1 No Action	Alternative 2 Proposed Action	Alternative 3	Alternative 4	Alternative 5	Alternative 6
Fish & Wildlife	Emphasize viewing; support ADF&G closures; protect tern nesting areas.	Emphasis on ethical fish and wildlife viewing; support ADF&G closures; if impacts are detected, additional protective measures may be implemented, sport fish enhancement.	Same as Alternative 2.	Same as Alternative 2 plus; close west side of Mendenhall Lake to protect arctic terns; close rock peninsula near west face of Mendenhall Glacier to protect nesting gulls (5/15 - 7/15).	Same as Alternative 2 plus; close west shoreline of Mendenhall lake to protect arctic terns; close rock area near west face of Mendenhall Glacier to protect nesting gulls (5/15 - 7/15); close south shoreline of Mendenhall Lake to protect shorebirds and waterfowl.	Same as Alt. 2 plus through signing and on-site interpreters, provide education visitors on potential impacts to shore nesting bird species from repeated disturbance; use special use stipulations to restrict commercial users from operating in area that will impact the gull colony on the west side of Mendenhall Lake; dogs must be on-leash from 4/15 thru 7/15 while on south and west shore of Mendenhall Lake.

## Affected Environment

The Recreation Area encompasses 5,815 acres at the head of the Mendenhall Valley. This area contains a wide variety of physical environments including glacial ice, steep valley walls, bare rock cliffs, flat glacial outwash, lakes and ponds, a river, and small streams. The vegetation ranges from primary successional forbs and lichens to mature spruce/hemlock forests. This variety of habitats attracts diverse fish and wildlife populations. The Recreation Area's proximity to one of Juneau's major residential areas and its easy access by out-of-town visitors also make it a popular destination for people pursuing many recreational activities such as hiking, photography, bicycling, ORV riding, sightseeing, camping, picnicking, boating, hunting, and wildlife viewing.

## Environmental Consequences

Chapter 4 of the EIS provides the analytical basis for comparison of the alternatives. It discusses the anticipated environmental effects associated with implementation of the action alternatives in comparison to the No Action Alternative.

### Issue 1 - Motorized Recreational Vehicle Use

#### Alternative 1 - No Action

- ORV use allowed on 207 acres and 7.8 miles of trail.
- Current level of ORV recreation opportunities would be maintained.
- Non-motorized users would continue to be impacted by ORV noise and presence.
- Model airplane use allowed, same level of opportunities as existing condition.
- Motorized boat use allowed causing conflicts between motorized and non-motorized users on Mendenhall Lake and Mendenhall River.
- No developed public boat launch may limit motorized access.

#### Alternative 2 - Proposed Action

- ORV and snowmobile use would be prohibited except on Mendenhall Lake when frozen.
- There would be a reduction of opportunities for ORV use in Juneau by 207 acres and 7.8 miles.
- New pioneer trails would not be developed and old ones would revegetate.
- Non-motorized users in summer would not be impacted by ORV noise and presence.
- No winter ORV and snowmobile use in Mendenhall Lake Campground, reducing opportunities.
- No conflicts between motorized and non-motorized users in Mendenhall Lake Campground in winter.
- Model airplane use allowed, same level of opportunities as existing condition.
- Motorized boat use allowed causing conflicts between motorized and non-motorized users on Mendenhall Lake and River.
- No developed public boat launch may limit motorized access.

#### Alternative 3

- ORV use allowed on 3.13 miles of designated ORV trail.
- Provide 17.5 acre ORV area between Moose and Crystal Lakes, 189.5 acres less than existing condition.

- Provides diverse trail system.
- Provides for separation of motorized and non-motorized users.
- Provides for separation of motorized users from adjacent neighborhoods.
- Fewer pioneered trails.
- Requires ORV and snowmobile permit and safety course.
- Non-motorized users would continue to be impacted by ORV noise and presence.
- No winter ORV and snowmobile use in Mendenhall Lake Campground, reducing opportunities.
- No conflicts between motorized and non-motorized users in Mendenhall Lake Campground in winter.
- Model airplane use allowed, same level of opportunities as existing condition.
- Motorized boat use allowed causing conflicts between motorized and non-motorized users on Mendenhall Lake and River.
- No developed public boat launch may limit motorized access.

#### **Alternative 4**

- ORV use allowed on 7.8 miles of trail.
- Provide 144 acre ORV use area, 63 acres less than existing condition, reducing opportunities.
- Provides for separation of motorized and non-motorized users, decreasing trail encounters.
- Provides for separation of motorized users from adjacent neighborhoods, reducing conflicts.
- Fewer pioneered trails.
- Requires ORV and snowmobile permit and safety course.
- Non-motorized users would continue to be impacted by ORV noise and presence.
- No winter ORV use in Mendenhall Lake Campground, reducing opportunities.
- No conflicts between motorized and non-motorized users in Mendenhall Lake Campground in winter.
- Model airplane use allowed, same level of opportunities as existing condition.
- Motorized boat use prohibited, reducing opportunities.
- No conflicts between motorized and non-motorized boat users on Mendenhall Lake and Mendenhall River.

#### **Alternative 5**

- Prohibits all motorized recreation, reducing opportunities.
- Effects similar to but greater than Alternative 2 - Proposed Action.
- Provides for greater sense of solitude for non-motorized users.
- No conflicts between motorized and non-motorized users.
- New pioneer trails would not be developed and old ones would revegetate.
- Model airplane use prohibited, reducing opportunities.
- Motorized boat use prohibited, reducing opportunities.
- No conflicts between motorized and non-motorized users on Mendenhall Lake and River.

#### **Alternative 6**

- ORV and snowmobile use prohibited, except for on Mendenhall Lake when frozen.
- There would be a reduction of opportunities for ORV use in Juneau by 207 acres and 7.8 miles.
- New pioneer trails would not be developed and old ones would revegetate.
- Non-motorized users in summer would not be impacted by ORV noise and presence.
- No winter ORV and snowmobile use in Mendenhall Lake Campground, reducing opportunities.

- No conflicts between motorized and non-motorized users in Mendenhall Lake Campground in winter.
- Model airplane use allowed, same level of opportunities as existing condition.
- Motorized boat use prohibited, reducing opportunities.
- No conflicts between motorized and non-motorized users on Mendenhall Lake and River.

## **Issue 2 - Firearm Use**

### **Alternative 1 - No Action**

- Shotguns allowed in dispersed areas (McGinnis Mountain) and in Moraine Lake Unit during waterfowl and rabbit seasons.
- With City and Borough of Juneau and State regulations, 58 acres are available for duck and rabbit hunting with shotguns and archery.
- 740 acres on McGinnis Mountain open to shotguns.
- Some public would be concerned with recreating in an area where firearms are being discharged.

### **Alternative 2 - Proposed Action**

- Use of firearms (shotguns, rim-fire and center fire rifles, pistols, BB guns, pellet guns, pellet paint guns) would be prohibited in all units.
- Loss of 740 acres for grouse and ptarmigan hunting with shotguns, loss of 58 acres for hunting waterfowl and rabbits with shotguns.
- Reduced hunting opportunities.
- Reduction of safety concerns with firearms discharge.

### **Alternative 3**

- Shotguns allowed in Dredge Lakes Unit during waterfowl and rabbit seasons.
- Within City and Borough of Juneau and State regulations, 58 acres are available for duck and rabbit hunting.
- 740 acres on McGinnis Mountain open to shotguns and rim-fire .22 caliber rifles.
- Increased level of hunting opportunities on McGinnis Mountain.
- Public concerns same as Alternative 1 - No Action.

### **Alternative 4**

- 740 acres on McGinnis Mountain open to shotguns and rim-fire .22 caliber rifles.
- All other units closed to firearms.
- Loss of 58 acres of rabbit and waterfowl hunting opportunities.
- Reduction in hunting opportunities.
- There would be no safety concerns regarding rabbit and waterfowl hunting in Dredge Lakes Unit.

### **Alternative 5**

- Firearms prohibited in all units, same effects as Alternative 2.

### **Alternative 6**

- Same effects as Alternative 3.
- Greatest level of hunting opportunities of all alternatives, except for Alternative 3.

- Public concern would be similar to Alternative 3.

### **Issue 3 - Commercial Use**

#### **Alternative 1 - No Action**

- No commercial allocation limits for commercial use of area, resulting in large increases of commercial use.
- Facility design capacities exceeded, resulting in public health and safety concerns.
- Increased visitors result in overcrowding in parking areas, view shelters, Visitor Center, and on trails near Visitor Center.
- Increased traffic, parking congestion, at Visitor Center parking lots.
- Highest level of commercial opportunities of all alternatives.
- Decreased enjoyment of area by visitors.
- Less solitude on trails.
- Least solitude for visitors of all alternatives.
- Trails, shelters, Visitor Center, parking areas would require more maintenance.
- Commercial concession facilities prohibited, reducing opportunities.

#### **Alternative 2 - Proposed Action**

- Criteria for commercial and special event Special Use Permits established, providing greater consistency and limiting impacts to other activities; criteria would also result in reduced opportunities for some commercial and special event special uses.
- Commercial use allocation levels for commercial use established at 65% of capacity for Visitor Center, providing opportunities for growth for next 4-12 years, until allocation levels reached. When new Visitor Center completed, opportunities for commercial growth for next 16-20+ years.
- Commercial use allocation levels for commercial use established at 65% of capacity for Mendenhall Lake and Mendenhall River, providing opportunities for commercial growth for next 7-16 years for Mendenhall River, and for next 5-10 years for Mendenhall Lake, until allocation levels reached.
- Once commercial allocation levels reached, some visitors will not be able to visit Recreation Area on guided tour.
- No commercial allocation levels for commercial use on trails, providing new opportunities for some operators.
- Commercial use allocation levels for commercial use at Visitor Center established at 246,570 visitors per summer; increased to 462,190 visitors per summer when the Visitor Center expansion project is completed. Allowed commercial uses would be bus, mini-van, car, taxi, limousine, and bike tours, package trips, charters, and point-to-point transportation.
- Commercial use allocation levels for commercial use on Mendenhall Lake established at 2,980 visitors per summer and on Mendenhall River at 38,190 visitors per summer.
- Increase of commercial use by 82,251 visitors over existing levels of commercial use at Visitor Center and on Mendenhall Lake and River.
- Moderate to high economic growth potential for commercial operators.
- Decreased enjoyment for some visitors due to crowding at Visitor Center.
- Less solitude on Mendenhall River and Mendenhall Lake than the existing condition.
- Same effect on visitor experience on trails as Alternative 1 - No Action.

- Effects to infrastructure less than Alternative 1 - No Action.
- Commercial concession facilities, effects same as Alternative 1 - No Action.

### Alternative 3

- Commercial and special event Special Use Permits effects, same as Alternative 2 - Proposed Action.
- Commercial use allocation levels for commercial use established at 75% of capacity for Visitor Center, providing opportunities for growth for next 8-18 years, until allocation levels reached. When new Visitor Center completed, opportunities for commercial growth for next 20-20+ years.
- Commercial use allocation levels for commercial use established at 75% of capacity for Mendenhall Lake and Mendenhall River, providing opportunities for commercial growth for next 9-20 years for Mendenhall River, and for next 5-10 years for Mendenhall Lake, until allocation levels reached.
- Commercial use allocation levels for designated trails established at 20% of capacity, providing opportunities for commercial growth for next 20-20+ years, until allocation levels reached.
- Commercial use allocation levels at Visitor Center established at 284,500 visitors per summer. Commercial allocation levels increased to 533,300 visitors per summer when the Visitor Center expansion project is completed.
- Commercial allocation levels established for outfitter/guide hiking on East Glacier, West Glacier, and Moraine Ecology trails, providing new business opportunities.
- Less solitude on East Glacier, West Glacier, and Moraine Ecology trails than existing condition.
- Less solitude on trails than current levels but more than Alternative 2 - Proposed Action; increased visitor numbers on trails on both sides of lake.
- No outfitter/guide hiking on other trails, reducing business opportunities.
- Commercial allocation levels for commercial use on Mendenhall Lake established at 3,720 visitors per summer and on Mendenhall River at 43,030 visitors per summer.
- Less solitude on Mendenhall Lake and River but more than Alternative 1 - No Action which has no commercial use allocations.
- Increase of commercial use by 139,900 visitors over existing levels of commercial use.
- Increased visitors result in crowding in parking area, view shelters, Visitor Center, and West Glacier Trailhead, but less than Alternative 1 - No Action,
- Decreased enjoyment of area by visitors.
- Trails, shelters, Visitor Center, parking areas would require more maintenance than Alternatives all other alternatives, except Alternative 1.
- Commercial concessions allowed if they meet established criteria, providing new opportunities.
- Increased satisfaction for some visitors because of additional concession amenities, others will experience decreased satisfaction because of change of area's natural character.
- Increased litter, congestion in parking lots from concessions.

### Alternative 4

- Commercial use allocation levels for commercial use established at 50% of capacity for Visitor Center, providing opportunities for growth for next 1-48 years, until allocation levels reached. When new Visitor Center completed, opportunities for commercial growth for next 12-20+ years.
- Commercial use allocation levels for commercial use established at 50% of capacity for Mendenhall Lake and Mendenhall River, providing opportunities for commercial growth for next 4-8 years for Mendenhall River, and for next 5-10 years for Mendenhall Lake, until allocation levels reached.

- Commercial use allocation levels for designated trails established at 20% of capacity, providing opportunities for commercial growth for next 10-20 years, until allocation levels reached.
- Commercial use allocation levels for commercial use at Visitor Center could be established at 189,670 visitors per summer and could be increased to 355,530 visitors per summer when the Visitor Center expansion project is completed.
- Some visitors would not be able to visit or travel to the Visitor Center by commercial tours.
- Demand for commercial services would exceed authorizations; prospectus would be issued.
- Outfitter/guide hiking on East Glacier and Nugget Creek trails with 48 persons per day in four groups, for a total of 5,950 visitors per summer on East Glacier Trail, and 2,980 visitors per summer on Nugget Creek Trail.
- Outfitter/guide hiking allowed for 96 people per day on 7.5 miles of trail.
- Less solitude on trails than current levels but more than Alternatives 1, 2 and 3; increased visitor numbers on trails concentrated on east side of lake near Visitor Center.
- Commercial use allocation levels for commercial use on Mendenhall Lake established at 1,860 visitors per summer and on Mendenhall River at 31,000 visitors per summer.
- Levels of solitude on Mendenhall River similar to the existing condition, but less than Alternative 5; less solitude on Mendenhall Lake than existing condition.
- Increase of commercial use by 24,152 visitors over existing levels of commercial use.
- Increased visitors result in crowding in parking area, view shelters, Visitor Center, but less than Alternatives 1, 2 and 3. Visitation by commercial tours would be similar to 1995 levels.
- Decreased enjoyment of area by visitors.
- Trails, shelters, Visitor Center, parking areas, would require more maintenance but not as much as Alternatives 1, 2 and 3.
- Commercial concession effects same as Alternative 1 - No Action.

#### **Alternative 5**

- All commercial use would be limited to the 1995 levels, limiting potential revenues.
- Commercial use allocation levels at Visitor Center could be established at the 1995 level or 179,748 visitors per summer. No increase in commercial use levels when the Visitor Center expansion project is completed. Commercial use authorized for existing uses only; no new tours, limiting opportunities.
- Commercial use allocation levels on Mendenhall Lake established at 160 service days per summer and on Mendenhall River established at 25,892 service days per summer, with no additional increases.
- Some visitors would not be able to visit or travel within the area by commercial tours.
- Demand for commercial services would exceed authorizations; prospectus would be issued.
- Commercial operators would experience the least room for economic growth.
- Visitors would experience the greatest solitude of the alternatives.
- Trails, shelters, Visitor Center, parking areas, would need less maintenance than any of the other alternatives.
- Commercial facilities concessions, effects same as Alternative 1 - No Action.

#### **Alternative 6**

- Commercial and special event Special Use Permits effects, same as Alternative 2 - Proposed Action.
- Effects of commercial use allocation levels at Visitor Center same as Alternative 2 - Proposed Action.
- Commercial use allocation levels for commercial use established at 65% of capacity for Visitor Center, providing opportunities for growth for next 4-12 years, until allocation



levels reached. When new Visitor Center completed, opportunities for commercial growth for next 16-20+ years.

- Commercial use allocation levels for commercial use established at 65% of capacity for Mendenhall Lake and Mendenhall River, providing opportunities for commercial growth for next 7-16 years for Mendenhall River, and for next 5-10 years for Mendenhall Lake, until allocation levels reached.
- Commercial use allocation levels for designated trails established at 20% of capacity, providing opportunities for commercial growth for next 17-20+ years, until allocation levels reached.
- Some visitors would not be able to visit or travel to the Visitor Center by commercial tours.
- Increased visitors result in crowding in parking area, view shelters, Visitor Center, but less than Alternatives 1 and 3. Visitation by commercial tours would be 30% higher than 1995 levels.
- Outfitter/guide hiking allowed for 120 people per day on 7.5 miles of trail, Monday through Friday, and for 72 people per day on 4.5 miles for trail on weekends.
- Effects of commercial use allocation levels established for outfitter/guide hiking on East Glacier and Nugget Creek same as Alternative 4.
- Effects of commercial use allocation levels for outfitter/guide use on West Glacier Trail similar to Alternative 3 except less business opportunity due to guided hiking limited to weekdays only.
- Less solitude on trails than current levels but more than Alternative 1, 2, and 3.
- Reduced conflicts and increased enjoyment for non-commercial users on West Glacier Trail.
- No commercial use of rock outcrop near glacier, reducing commercial opportunities.
- Increased sense of solitude and enjoyment for non-commercial users using rock outcrop near glacier.
- Outfitter/guide commercial use allocation levels for commercial use on Mendenhall Lake and Mendenhall River same as Alternative 2 - Proposed Action.
- Same levels of solitude on Mendenhall Lake and Mendenhall River as Alternative 2 - Proposed Action.
- Demand for commercial services would exceed authorizations; prospectus would be issued.
- Same level of maintenance as Alternative 2 - Proposed Action.
- Commercial concession facilities effects, same as Alternative 1 - No Action.

## **Issue 4 - Access**

### **Alternative 1 - No Action**

- New construction and conversion of parking lots at Visitor Center would provide for additional parking, but area would continue to be crowded.
- West Glacier Trailhead and Skater's Cabin would continue to be crowded with fifteen spaces available at West Glacier, Skater's Cabin upgraded to fourteen spaces.
- Back Loop Bridge Trailhead would continue to be crowded with only seven spaces.
- Dredge Lake Road Trailhead would continue with parking for four cars, leading to crowding, noise, and garbage problems. Visitors would continue to drive through residential area to reach trailhead.
- Gladstone Avenue and Administrative Site would continue with one to two parking spaces.
- No new access points into Recreation Area would provide same level of access as existing condition.

## **Alternative 2 - Proposed Action**

- New construction and conversion of parking lots at Visitor Center would provide for additional parking, but area would continue to be crowded.
- West Glacier Trailhead and Skater's Cabin, same as Alternative 1 - No Action.
- Gladstone Avenue Access would continue with two to three spaces, same as Alternative 1 - No Action.
- Back Loop Bridge Trailhead could be reconstructed to accommodate twelve vehicles resulting in less crowding. Construction of emergency vehicle access could allow easier, more time efficient access for river rescue crews.
- Dredge Lake Road Trailhead impact would be similar to Alternative 1 - No Action, but there would be less crowding due to possible construction of two new trailheads.
- Possible construction of seven to twelve new parking spaces at Glacier Spur Road could lead to less congestion at other parking areas.
- Possible construction of five to seven new parking spaces at the Administrative site could lead to less congestion at other trailheads.
- Due to ORV prohibition, there would be less congestion at trailheads in summer.
- All access points closed midnight to 6:00 a.m., resulting in less vandalism.

## **Alternative 3**

- Vehicle access would be allowed for boat and wind surfing launch at the West Glacier Trailhead, increasing recreation opportunities on Mendenhall Lake and Mendenhall River.
- Back Loop Bridge Trailhead would be unavailable for ORV access, reducing access for some ORV users.
- Two new trailheads for ORV's access could be developed, redirecting ORV traffic away from residential neighborhoods and reducing conflicts with residential neighborhoods.
- Easements for City and Borough of Juneau could be considered to develop five maintenance and emergency vehicle turnarounds, providing increased access to Recreation Area, but also potential for increased vandalism and illegal use.
- Other effects the same as Alternative 2 - Proposed Action.

## **Alternative 4**

- Effects same as Alternative 2 - Proposed Action except for two new trailheads for ORV access, effects same as Alternative 3.

## **Alternative 5**

- Effects the same as Alternative 2 - Proposed Action with the exception that Dredge Lake Road Trailhead would be closed, resulting in less impacts to the residential area, but also less access for all users to the Recreation Area.
- More parking could be available than Alternative 1 - No Action due to possible reconstruction of two existing trailheads.

## **Alternative 6**

- Effects same as Alternative 3, except that the trailheads at the Administrative Site and on Glacier Spur Road would not allow ORV access.

## **Issue 5 - Fish and Wildlife**

### **Alternative 1 - No Action**

- Reduced fish productivity due to 200 square yards (0.04 acres), or 14% of available spawning habitat in the Dredge Lakes Unit impacted by ORV's crossing streams.
- Protection of tern and shorebird habitat due to seasonal restriction on visitor use of Tern Island.
- Songbird habitat would continue to be impacted by pioneer trails.

### **Alternative 2 - Proposed Action**

- Area closed to firearm and ORV use.
- Impacts to spawning habitat would be reduced.
- Prohibiting ORV's would allow trails to become revegetated, which would provide new habitat, benefiting songbirds.
- If impacts are identified, new protective measures could be implemented. This could lead to greater reproductive success for terns, gulls, and shorebirds.

### **Alternative 3**

- Less impact to fish habitat as designated ORV trails deter ORV crossings of streams in spawning areas.
- Impacts to shorebirds, arctic terns, and gulls would be the same as Alternative 2 - Proposed Action.
- Less impact to songbird habitat than Alternative 2 - Proposed Action due to fewer pioneer trails.

### **Alternative 4**

- Impacts to spawning habitat would be the same as Alternative 2 - Proposed Action because ORV area would be away from spawning streams.
- West shore of Mendenhall Lake would be closed to foot traffic from May 15 through July 15, protecting the gull colony, fifty acres of shorebird nesting area, and 100 acres of tern nesting area, which could lead to greater reproductive success of these species.
- Less impact to songbird habitat than Alternative 2 - Proposed Action due to fewer trails.

### **Alternative 5**

- Impacts to spawning habitat would be the same as Alternative 2 - Proposed Action.
- The impacts to shorebirds, arctic terns, and gulls would be the same as Alternative 4 with the additional protection of fifty acres of habitat for shorebird and arctic tern nesting habitat along the south shore of Mendenhall Lake, which could lead to greater reproductive success.
- Less impact to songbird habitat than Alternative 2 - Proposed Action due to fewer trails.

### **Alternative 6**

- Area closed to ORV use.
- Impacts to spawning habitat would be reduced.
- Prohibiting ORV's would allow trails to become revegetated, which could provide more habitat, benefiting songbirds.
- Monitoring and seasonal protection measures could reduce impacts to shorebirds, arctic terns, and gulls, leading to greater reproductive success.

- Dogs on-leash along the south and west shores of Mendenhall Lake from April 15 through July 15 could protect nesting shorebirds and waterfowl leading to increased survival of young.
- Greater information and education to the public about Mendenhall Lake to protect shorebirds and waterfowl could result in reduced impacts to nests, leading to greater reproductive success.
- Special Use Permits would have stipulations to protect nesting gulls from April 15 through July 15 on the rock outcrop near the west face of Mendenhall Glacier.

# **Chapter 1**

## **Purpose of and Need for Action**

### **A. Introduction**

#### **Background**

The Mendenhall Glacier Recreation Area is a regional, national, and international attraction. Established in 1947 by order of Regional Forester Frank Heintzleman, the Recreation Area, and most notably the Mendenhall Glacier, has become a significant part of the local and regional identity. The area has been popular with local and out-of-town visitors since the 1940's, with visitation to the area growing steadily, from an estimated 43,000 in 1962 to over 315,000 visitors projected for 1996 (USDA Forest Service, 1996).

The original Mendenhall Glacier Recreation Area Management Plan was approved by Regional Forester P.D. Hanson on August 12, 1960. Revisions were made in 1965 and again, after lengthy public involvement efforts, in 1975. Since then, the 1975 Mendenhall Glacier Recreation Area Management Plan has provided the management direction for the area.

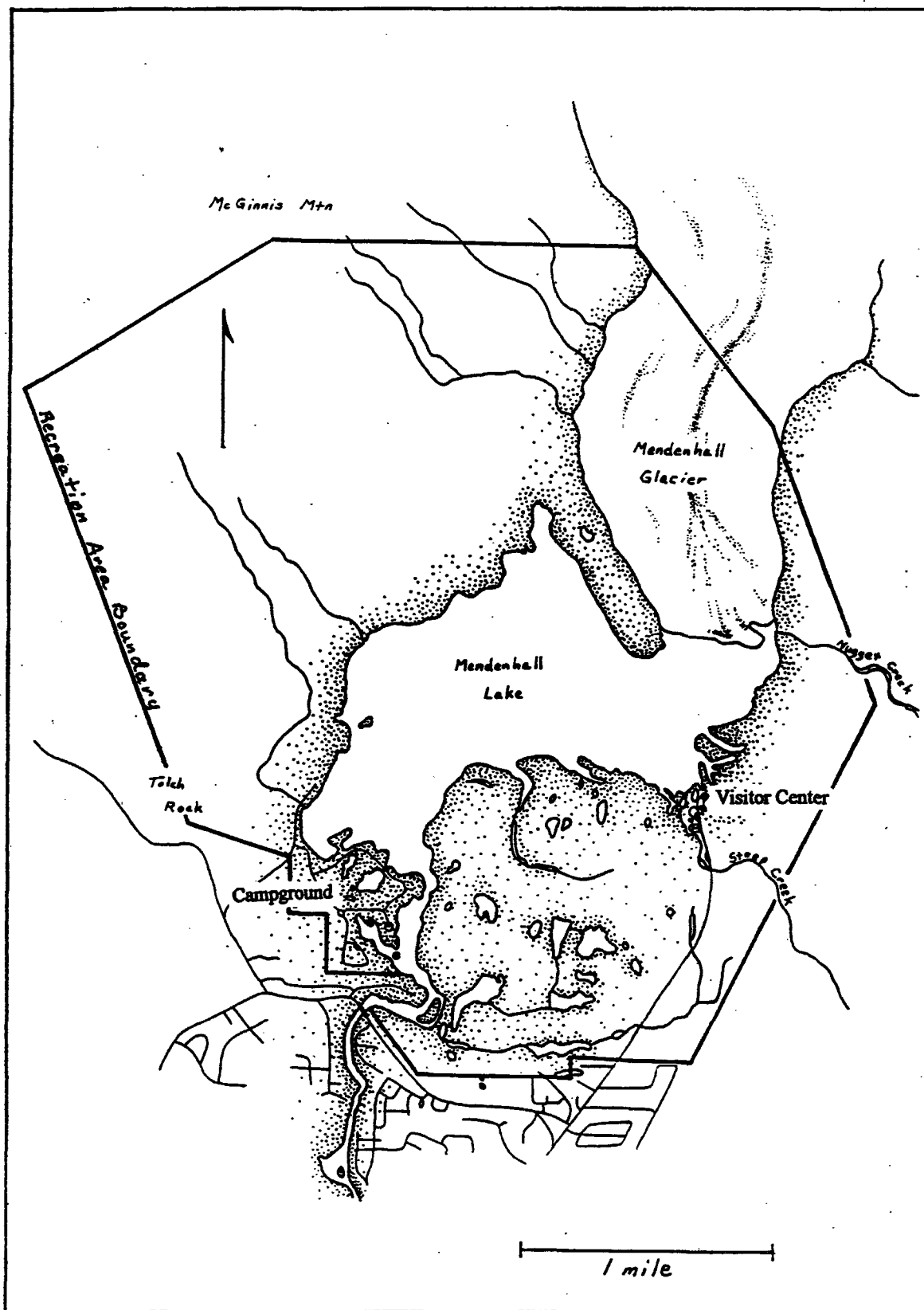
As manager of the Recreation Area, the USDA Forest Service must periodically review its management to keep pace with changing policy, use patterns, and the needs and expectations of the public. Several situations have evolved since implementation of the 1975 Management Plan. These include changes in use patterns, conflicts among user groups, resource damage concerns, and new project opportunities. In response to these changes, the 1975 Management Plan was reviewed and revisions proposed and circulated for public comments. One of the alternatives developed in this revision process will replace the 1975 Management Plan, and become the 1996 Mendenhall Glacier Recreation Area Management Plan, providing the direction that will guide the future management of the Recreation Area.

#### **Area Location**

The Mendenhall Glacier Recreation Area is located approximately fourteen miles from downtown Juneau and is within the Mendenhall Valley, the area of most rapid urban development in the City and Borough of Juneau. Use patterns within the Recreation Area are influenced by local and out-of-town visitors.

The Recreation Area encompasses 5,815 acres and includes parts of McGinnis Mountain and Mt. Bullard, the terminus of the Mendenhall Glacier, Mendenhall Lake and River, and the surrounding uplands. Elevations through much of the Recreation Area are less than 100 feet above sea level. On either side, mountains rise abruptly to over 4,000 feet. From its source twelve miles up in the Juneau Icefield, the Mendenhall Glacier flows between Bullard Mountain and McGinnis Mountain to Mendenhall Lake. The glacier is approximately 0.5 miles wide near Nugget Falls and stretches to almost two miles wide higher up the valley. The Mendenhall Glacier Visitor Center sits about 0.5 miles from the face of the glacier (see Map 1).

## Map 1. Mendenhall Glacier Recreation Area



## **Desired Future Condition**

The Forest Service's overall management goal for the Recreation Area is to manage it principally for recreation use while retaining the area substantially in its natural condition. Primary emphasis is to be placed on protecting natural resource values while balancing natural resource use with human recreation needs.

The agency's overall vision for the Recreation Area is for the area to remain relatively undeveloped, allowing for concentrated use at two specific sites (the Visitor Center and Mendenhall Lake Campground), moderately concentrated use at three sites (West Glacier Trailhead, Skater's Cabin, and Mendenhall River), and managing for dispersed, low to moderate use in the rest of the Recreation Area.

The recreation opportunities to be provided are intended to give visitors a chance to experience the Mendenhall Glacier and the glacial landscape "up close," yet not adversely impact the natural resources of the area. For local and out-of-town visitors alike, this area offers a unique opportunity to experience a glacier and the rebirth of a glacial landscape without being in a wilderness setting. The goal is to ensure both high quality recreation experiences and a healthy ecosystem that can provide for and sustain these high quality recreation experiences over an extended time.

## **B. Purpose and Need**

### **Purpose**

The purpose for revising the 1975 Management Plan is to develop a management strategy which provides more specific management direction for the Recreation Area, addresses conflicts among recreational user groups, reduces risks to public health and safety, and protects the natural resources of this special area.

The management strategy for revising the 1975 Management Plan is purposely broad to provide for flexibility in responding to future changing uses in the area. The goal of management is not to increase satisfaction of all users, but instead, to provide satisfactory recreational experiences of a certain type, as defined by ROS class, in the Recreation Area. Because of the complexity of uses and demands, the Management Plan is intended to provide the framework for more pro-active decision making for problems and new opportunities that may occur in the foreseeable future.

### **Need**

Since 1975, public use patterns and values regarding management of the Recreation Area have changed. Use has increased with the growth of the tourism industry and population growth in the Mendenhall Valley. Conflicts have steadily increased among off-road vehicle (ORV) users, hikers, bicyclists, and horseback riders. In particular, there is a need to resolve public concerns related to discharge of firearms and use of ORV's within the Recreation Area. Additionally, chronic vandalism, illegal dumping of garbage, late night parties, and excessive noise continue to be problems. There is also a need to address concerns regarding resource damage from recreational uses.

## **C. Proposed Action**

The Forest Service proposes to revise the 1975 Management Plan, which would result in a non-significant amendment to the Tongass Land Management Plan. The proposed action provides a

revised management strategy, provides more specific overall management direction, changes management unit boundaries and provides more specific guidelines for management units within the Recreation Area.

Overall management direction that would stay the same as in the 1975 Management Plan includes continued prohibitions on concessionaires, continuing to allow commercial uses compatible with area values, improvement of trail quality and diversity, allowing horseback riding and bicycle use (with restrictions in some areas), emphasizing environmental education, allowing fisheries enhancement projects, supporting the State trapping closure for the entire Recreation Area and State hunting closure for goats on Bullard Mountain, and allowing individuals to collect ice for personal use.

In some instances, in order to address public health and safety issues and resource damage concerns, stronger overall management direction is deemed necessary. The following lists some of the changes in the overall direction for the Recreation Area that were formulated:

- eliminating ORV and snowmobile use in the Recreation Area, except for winter use on west side of Mendenhall Lake
- prohibiting discharge of all firearms throughout the Recreation Area; firearms are defined as shotguns, rifles, handguns, BB guns, pellet guns, and pellet paint guns
- protecting wildlife habitat from disturbance during critical nesting and rearing periods
- protecting plants, soils, cultural, historic, and aesthetic resources
- emphasizing ethical wildlife viewing
- establishing more specific criteria for special event use and for commercial uses (outfitter/guide) in the Recreation Area
- allowing bicycles, skateboards and rollerblades in all units with restrictions in the Visitor Center Unit and in the Mendenhall Lake Campground
- requiring dogs to be on leash in the Visitor Center Unit and in the Mendenhall Lake Campground
- incorporating vandalism resistant design into new facilities
- prohibiting timber harvest or tree cutting in the Recreation Area, except for vegetation management measures to maintain scenic viewpoints

The alternative selected as the 1996 Management Plan will include an updated list of proposed projects to be considered for implementation over the next decade. Depending on the project proposal, each of these proposed projects could require separate site specific environmental analyses.

## **D. Decision to be Made**

The Forest Supervisor for the Chatham Area of the Tongass National Forest will decide whether or not to approve Alternative 2 - Proposed Action, or an alternative to that Proposed Action, as the 1996 Mendenhall Glacier Recreation Area Management Plan. If an alternative is approved as the 1996 Management Plan, it would result in a non-significant amendment to the Tongass Land Management



Plan, and also an amendment to the Juneau Ranger District 1985 Off-Road Vehicle Management Plan. No site specific projects are authorized as part of this decision.

## **E. Public Involvement**

Public involvement for the Mendenhall Glacier Recreation Area Plan revision was first initiated in May 1993, when the agency solicited public comment on the preliminary issues to be addressed in the revision of the 1975 Management Plan. Approximately 250 letters were sent to various individuals, agencies, and organizations. Three public meetings were held with approximately 100 people attending. A front page article in the *Juneau Empire*, public service announcements, and interviews with local radio stations also notified the public of the process to revise the 1975 Management Plan.

In addition to comments from the public meetings, 79 written and phone comments from individuals, organizations and agencies, and a petition from an adjacent homeowners group were received by the Juneau Ranger District during this period in 1993.

After reviewing public comment on the issues to be addressed in the revision to the 1975 Management Plan, the Draft 1995 Management Plan was formulated and sent out for public comment as the Proposed Action in November 1994.

Public scoping for the management plan revision began November 1994, with publication of a Notice of Intent for this Environmental Impact Statement (EIS) in the Federal Register. Public scoping efforts included news releases and the publication of a full page newspaper insert in the *Juneau Empire*, followed by 320 letters sent to various individuals, agencies, and organizations requesting public comment on the plan. Two public "Open Houses" were held, with approximately 100 people attending. In January 1995, the Forest Service also sponsored a one day workshop (two 4-hour sessions) where people could specifically discuss ORV use in the Recreation Area. Letters notifying the public of this workshop were sent out and interviews were held with the local news media. This workshop was attended by 45 people.

At the end of this public scoping period on the Proposed Action, 138 comments and three petitions had been received by the Juneau Ranger District.

On October 2, 1995, the Draft Environmental Impact Statement (DEIS) was mailed out for public review, with a 45 day comment period that lasted until November 17, 1995. Approximately 514 copies of the DEIS were mailed to interested people, organizations and agencies, as well as the local, state and university libraries. On October 8, 1995, a front page article appeared in the *Juneau Empire*. Interviews were also conducted with KTOO, KJNO, and KINY radio. At the conclusion of this public comment period, 45 comments were received. Copies of these letters and agency responses to these comments are found in Final Environmental Impact Statement (FEIS) Appendix A, Response to Public Comments.

A Notice of Intent for this EIS was placed in the Federal Register in November of 1994. The Federal Register is read by a large number of individuals, both nationally and internationally. Although national and international visitors to the Recreation Area were not contacted directly during scoping, a large number of companies who do business with these visitors were contacted. Twelve of these companies responded with detailed comments to the DEIS. It is believed that these responses, which account for approximately one quarter of all of the responses on the DEIS, adequately represent national and international visitors who are the clients of the respondents. Additional responses were received from the City and Borough of Juneau, Ducks Unlimited, and Juneau Convention and Visitors Bureau. These organizations also represent local, regional, national, and international interests.

For more information on the public involvement process, please see FEIS Appendix D, Summary of Public Involvement.

## **F. Significant Issues**

The initial public comments from 1993 were sorted and grouped into similar categories, then analyzed to determine if there were any significant issues. These preliminary significant issues were identified and used to develop the changes to the 1975 Management Plan, resulting in the Proposed 1995 Management Plan that was presented as the Forest Service Proposed Action for public scoping in November 1994.

Public comments received during scoping between November 1994 and January 1995, were sorted and grouped into similar categories, and analyzed to determine the issues. From these public comments, and from the initial analysis of public comment received in 1993, the following were determined to be significant issues to be addressed in this EIS.

### **Issue 1. Motorized Recreational Vehicle Use.**

This issue reflects public concern for safe use of trails by non-motorized recreationists as well as concern by recreationists who use motorized vehicles that they be allowed to continue these uses. ORV generated noise and resource damage are also components of this issue.

Concerns expressed by the public include not feeling safe in areas where ORV's are operating due to speed, noise, and the lack of courtesy by some motorized users. The un-regulated ORV use in the Dredge Lakes Unit of the Recreation Area is causing deteriorating experiences and resource damage such as soil rutting, vegetation loss, and silting of streams and ponds.

Other motorized recreational vehicle uses to be considered include motorized boat use on Mendenhall Lake, flying of model airplanes, and winter use of snowmobiles. Those who fly model airplanes have expressed their desire for this use to continue.

Comments reflect public opinion that the user conflicts are a result of poor law enforcement, that this is the only legal place left for motorized recreationists to operate in the Mendenhall Valley, that only a small group of people are causing the conflicts, and that this is a good area for families to bring their children to teach them skills in proper equipment use.

This issue will be evaluated based on designated ORV acres and miles of trail available for this use both within the Recreation Area and in the Juneau area.

### **Issue 2. Firearm Use.**

This issue reflects public concern for the safety of people recreating in an area where firearms are being discharged, as well as concerns for continuing opportunities for use of firearms during hunting season.

Some people expressed concerns for their safety while recreating in areas where firearms are being discharged. Residents living along the forest boundary have concerns about stray bullets.

There are others who support continuing opportunities for those who have traditionally hunted grouse, ducks, and snowshoe hares in the Recreation Area.

This issue will be evaluated based on the following items: a discussion on safety for each alternative; opportunity for similar hunting experiences in other areas close to the Mendenhall Valley; and acres of habitat suitable for grouse, ducks, and snowshoe hares within the Recreation Area.

### **Issue 3. Commercial Use.**

This issue reflects public concern that the amount of authorized commercial uses (outfitter/guide ventures) is negatively affecting the recreational experience for non-commercial users. On the other hand, there is also increased demand for more commercial use at the Visitor Center as well as throughout the entire Recreation Area.

This issue will be evaluated based on the following items: the current and future capacity limits at the Visitor Center, based on facility capacity designs; what the visitor should expect per Recreation Opportunity Spectrum (ROS) class for the Visitor Center, trails, and Mendenhall Lake and River; the effect on visitors of a range of commercial use levels; the effect on business opportunities; and projected commercial growth opportunities and when commercial use allocation levels would be reached.

### **Issue 4. Access.**

This issue reflects public concern that there is an inadequate distribution of access points into the Recreation Area. Some interests want to increase search and rescue access to the Mendenhall River and also increase parking options along main travel routes. Other users want to eliminate recreational access through residential areas.

This issue will be evaluated based on the following items: the number and type of access points; proximity of access point to residential areas; the need to provide special access to the Mendenhall River for river rescue operations; and hours that areas would be kept open for public use.

### **Issue 5. Fish and Wildlife.**

This issue reflects public concern for protection of fish and wildlife habitat from recreation activities. The main impacts to fish and wildlife resources within the Recreation Area are human disturbance and physical habitat alteration resulting from facilities and trail development. The wildlife species of most concern include gulls, shorebirds, terns, migratory songbirds, and anadromous fish.

This issue will be evaluated based on the following items: types and levels of recreation activities that become detrimental to wildlife species in the Recreation Area; acres of habitat impacted per species or group; and hunting and fishing opportunities.

## **G. Non-Significant Issues**

The following topics were evaluated as issues, then determined to be non-significant based on one of the following considerations: it was outside the scope of this analysis; it could be grouped with another issue; it was of limited extent, duration, and intensity; or it was dealt with through other laws. They were not addressed further in this analysis.

### **1. Horse Use.**

Public comment supported continuing this use. There would be restrictions on horse use in certain areas where there are concentrations of people, such as the Mendenhall Lake Campground and the

Visitor Center Unit. This was not a significant issue since horse use would continue in the Recreation Area.

## **2. Dogs.**

Increased public use may increase the number of uncontrolled dogs in the Recreation Area. The Proposed Action would require dogs on-leash in developed recreation sites such as the Mendenhall Lake Campground and the Visitor Center Unit. This is existing federal regulation, therefore would not require any management plan changes. In other parts of the Recreation Area, dogs can be off-leash, but under control of owners.

## **3. Garbage Dumping.**

Vandalism of this sort is an on-going problem. These activities are against the law. Actions that can be taken to lessen this problem can be implemented under all alternatives and do not require overall management changes.

## **4. Mendenhall River Bridge.**

We received public comment supporting and opposing this potential project. Construction of a small bridge across the Mendenhall River as part of a trail to connect the Mendenhall Lake Campground to the Visitor Center requires a project specific analysis, and therefore is outside the scope of this EIS.

## **5. Juneau Ranger District Administrative Site.**

The 1975 Management Plan shows the old Federal Aviation Administration (FAA) site off of the Back Loop Road as a potential Forest Service administrative site to be used as a ranger station, housing or warehouse facilities. There was little public interest in this issue. Originally it was thought that this area was within the boundaries of the Recreation Area. Since publication of the Proposed 1995 Management Plan however, it has been determined that this site is outside the boundary of the Recreation Area and outside the scope of this document. Discussion of cumulative impacts if a future administrative facility were designated and developed at this site is discussed in Chapter 4, I. Cumulative Effects.

## **6. Mendenhall Lake Campground.**

Several comments concerning changes in policy of use and development for the campground were received. Development concerns such as adding low level lights for cross-country skiing were addressed in the July 1993 Mendenhall Campground Environmental Analysis and Decision, which authorized reconstruction and changes to the existing campground. Issues regarding campground development were addressed in that decision process, and are outside the scope of this EIS. Other issues such as winter use in the campground are being addressed in each alternative.

## **7. Trails.**

Trail maintenance, desired future trail development, and trail improvements are a concern. The Juneau Ranger District Trail Maintenance Plan, which contains all trails within the Juneau Ranger District including those in the Recreation Area, determines annual trail maintenance levels on trails, depending on yearly budgets. This annual plan will be used in conjunction with the Management Plan which will contain a list of designated trails within the Recreation Area, to determine yearly trail maintenance levels and improvements.

## **8. Visitor Center.**

There were several site specific concerns listed, such as bus management ideas during tourist season, changes to the Visitor Center parking lot lighting, closure hours, and vandalism control. Most of these suggestions can be implemented through changes in existing special use permits issued to tour operators or minor changes to normal operations. Public comments on changing access hours to the Recreation Area overall have been incorporated into the range of alternatives for analysis.

## **9. Mendenhall Glacier and Mendenhall Lake and River Access.**

There were a few comments asking to reduce safety restrictions regarding accessing Mendenhall Glacier (i.e., warning signs), and Mendenhall Lake and Mendenhall River. The Forest Service is required to provide for public health and safety, especially in designated recreation areas, and does not have the latitude to remove public safety restrictions. Public comments concerning access to the lake and boat use were incorporated into the range of alternatives for analysis.

## **H. Existing Management Direction**

Set apart and withdrawn as a special area in the late 1940's and early 1950's, the Recreation Area's overall management direction primarily comes from the Tongass Land Management Plan (TLMP, 1985, as amended), the 1975 Mendenhall Glacier Recreation Area Management Plan, and federal regulations (36 CFR 294.1 [a]) establishing that special areas be managed principally for recreation use substantially in the area's natural condition. Additional management direction for the Recreation Area is also established in a number of agency directives, management plans, Recreation Opportunity Spectrum (ROS) classes, and other federal laws and regulations. This direction is further summarized in FEIS Appendix C, Existing Management Direction.

In all of the proposed alternatives, human activities may occur within wetlands and floodplains. These include recreational activities as well as development projects involving construction. Executive Orders 11988 and 11990 provide management direction to the Forest Service for activities occurring on floodplains and wetlands. The goal of Executive Order 11990 is to avoid, to the extent possible, the long and short term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative. The goal of Executive Order 11988 is to avoid, to the extent possible, the long and short term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative. The Forest Service will fully implement these executive orders in the management of the Recreation Area, no matter which alternative is chosen. The potential impacts and mitigation measures associated with any future development within the Recreation Area will be analyzed in separate project-specific NEPA documents.

Executive Order 12962, of June 7, 1995, directs federal agencies to conserve, restore, and enhance aquatic systems to provide for increased recreational fishing opportunities nationwide. Section 1 of this Executive Order directs federal agencies to evaluate effects on aquatic ecosystems and recreational fisheries, develop and encourage partnerships, promote restoration, and provide access and promote awareness of opportunities of recreational fishery resources.

## **I. Other Laws and Regulations**

### **U.S. Army Corp of Engineers**

The Corps of Engineers (COE) administers Section 404 of the Clean Water Act and assures compliance with Executive Orders 11988 and 11990 concerning activities in the Recreation Area that may occur within wetlands or floodplains, and may require Section 404 permits from the COE.

### **U.S. Fish and Wildlife Service**

The U.S. Fish and Wildlife Service administers the Endangered Species Act (excluding marine mammals) as re-authorized in 1982, and the Bald Eagle Protection Act of 1940, as amended. The Forest Service must consult with the U.S. Fish and Wildlife Service regarding any threatened or endangered species that might be impacted by the proposed action or alternatives. If any impacts are projected, measures to protect the species must be developed.

### **National Historic Preservation Act (1966)**

Under this authority, "It shall be the policy of the Federal Government, in cooperation with other nations and in partnership with the States, local governments, Indian tribes, and private organizations and individuals to (5) encourage the public and private preservation and utilization of all usable elements of the Nation's historic built environment."

The Forest Service program for compliance with the National Historic Preservation Act includes locating, inventorying, and nominating all cultural sites that may be directly or indirectly affected by scheduled activities. An evaluation was conducted on the existing Visitor Center in the Mendenhall Glacier Visitor Center Improvement Environmental Assessment (1995). The assessment of the building conducted for the evaluation concludes that the building is determined eligible for the National Register of Historic Places according to the Code of Federal Regulations, Title 36, Part 60, Section 4 (36 CFR 60.4), because of its uniqueness as the first Forest Service visitor center and the first visitor center constructed in the western hemisphere built to interpret glacial phenomena.

Also under this authority, the Forest Service will protect and preserve cultural and other historical resources which are included in the Recreation Area. While there are no known cultural or historical resources which would be affected by the implementation of this management plan, site specific projects will undergo archeological and cultural clearances prior to any implementation.

### **Alaska Department of Governmental Coordination**

The Alaska Coastal Management Program (ACMP) was established by the Alaska Legislature in 1977. The Alaska Coastal Management Act (AS 46.40) provides the legislative authority for the program. The purpose of the program is to provide a streamlined coordinated system for reviewing applications and issuing permits for proposed projects that would affect natural resources in Alaska's coastal zone.

Two sets of State regulations have been adopted for the program. The Alaska Administrative Code (6 AAC 50) contains regulations governing how the State reviews projects for consistency with the ACMP. These regulations were adopted in 1984. Also, the Coastal Policy Council promulgated regulations governing ACMP based on AS 46.40 as 6 AAC 80 and 6 AAC 85. These regulations were adopted in 1979 and subsequently have been amended several times.

## **Alaska Department of Fish and Game**

Alaska Department of Fish and Game provides comments and recommendations to federal agencies via the Fish and Wildlife Coordination Act (16 USDF 66, et seq.).

## **Alaska State Hunting Regulations**

**Mendenhall Lake Closed Area** - consists of the area within 0.25 miles of Mendenhall Lake, the Mendenhall Glacier Visitors Center, and the Visitor Center parking area. The area is closed to hunting.

**Juneau Road System Closed Area** - consists of that area between the coast and a line 0.25 miles inland of the following road systems: Glacier Highway from Mile 0 to Mile 24 at Peterson Creek, Douglas Highway from the Douglas city limits to Mile 7 on the North Douglas Highway, Mendenhall Loop Road and Thane road. The area is closed to taking big game.

## **City and Borough of Juneau**

**Coastal Zone Management.** The City and Borough of Juneau reviews each project proposal consistency finding and determines whether or not it is consistent with the Juneau Coastal Management Program.

**City and Borough Ordinance 42.20.050 - Discharging Firearms.** It is unlawful for any person except a peace officer in the line of duty to fire or discharge any pistol, gun, rifle or other type of firearm within 0.5 miles of any public street, road or highway within the City and Borough of Juneau, or a ski lift within the Eaglecrest Ski area, except that it is not unlawful to discharge a firearm at a rifle range, target shooting range, trap shooting range or other area which is established for such purpose; provided, that within the immediately preceding year the Chief of Police has approved that area as being safe for such purpose; and provided, that such shooting is adequately supervised and safely conducted.

**City and Borough Ordinance 42.20.95 - Disturbing the Peace.** It is unlawful for a person to: (1) in a public place, make an unreasonably loud noise to disturb or in the reckless disregard of the peace or privacy of others; (2) In a private place, make an unreasonably loud noise with the purpose to disturb or in reckless disregard of the peace or privacy of others not in the same place, after being informed that such conduct is having or likely to have that effect; (3) Between the hours of eleven p.m. and seven a.m.: operate or use a pile driver pneumatic hammer, bulldozer, road grader, loader, power shovel, derrick, backhoe, power saw, manual hammer, motorcycle, appliance or vehicle which generates an unreasonably loud noise, after having been informed by another that such operation or use is disturbing or is likely to disturb the peace or privacy of others.

"Unreasonably loud noise" is a sound which, if, considering the nature and purpose of the defendant's conduct and the circumstances known to him or which should be known to him, including the nature of the location and the time of day or night, his conduct involves a substantial deviation from the standard conduct that a reasonable sober person would follow in the same situation. Noise does not include any element or quality of speech or conduct which is constitutionally protected.

# **Chapter 2**

## **Alternatives, Including the Proposed Action**

### **A. Introduction**

The National Environmental Policy Act (NEPA) requires consideration of alternatives to the proposed action which address significant issues identified in the scoping process. The discussion of alternatives in Chapter 2 is the heart of the EIS process (40 CFR 1502.14). This chapter describes the alternatives based on information and analysis relative to the significant issues found in Chapters 3 and 4.

Chapter 2 describes the Proposed Action and alternatives to the Proposed Action for revising the 1975 Mendenhall Glacier Recreation Area Management Plan. This chapter also summarizes the process used to develop alternatives that respond to the issues identified in scoping. The chapter ends with a discussion of actions common to all alternatives, mitigation measures, and enhancement opportunities. There were no alternatives considered but eliminated from detailed study.

### **B. Clarification of the No Action Alternative, the Proposed Action, and the Preferred Action**

Several public comments on the DEIS indicated that people were confused with the terminology that is used in the environmental analysis process. The No Action Alternative is considered the existing management direction and is called "no action" because no action is being taken to change or alter this option. A No Action Alternative is a viable alternative; it does not imply "no management action" by the agency. In this document, Alternative 1 is the No Action Alternative and represents continuation of direction in the existing 1975 Recreation Area Management Plan.

The Proposed Action is the action that the Forest Service originally proposed to do. In November 1994, as part of the scoping process for this analysis, the Forest Service released proposed revisions to the existing management plan (the Proposed 1995 Mendenhall Glacier Recreation Area Management Plan) for public review and comment, which then became the Proposed Action. In this EIS, it is identified as Alternative 2 - Proposed Action.

Public comment on the Proposed Action then lead to the development of a range of alternatives to the Proposed Action which respond to the issues raised by the public. These were then presented to the public for further review in the Draft Environmental Impact Statement (DEIS). The DEIS lists all the alternatives (including the No Action Alternative, the Proposed Action, and any new alternatives), and describes their effects on the environment.

In the DEIS, the Forest Service also identified a Preferred Alternative which is the alternative it recommends being chosen when the decision is made. When the DEIS was released for public comment in October 1995, the Preferred Alternative was identified as Alternative 4. However, this Preferred Alternative may change after public comments are received and further analysis is done for the Final Environmental Impact Statement (FEIS).



The actual alternative that is selected by the deciding official for implementation is identified in the Record of Decision (ROD) and is thereafter referred to as the Selected Alternative.

## **C. Formulation of Alternatives**

A systematic interdisciplinary approach was used in formulating the range of alternatives to the Proposed Action. Based on public response to scoping and numerous public meetings, several alternative management strategies were identified (see Chapter 1, Section E. Public Involvement). These were grouped into compatible resource concerns and formulated as possible alternatives to the Proposed Action. Alternatives were based on internal, as well as external scoping. Of particular help was the public input from the ORV workshops held January 14, 1995, because it was both issue specific (ORV's) and site specific, with participants' suggestions drawn on maps. Alternative 6 was developed in response to public comments on the DEIS and is a compilation of Alternatives 2, 3, and 4, with minor modifications.

## **D. Alternatives Considered in Detail**

Six alternatives were developed for the FEIS. Five action alternatives were formulated to explore ways to respond to public concerns and issues, while meeting the purpose and need for revising the 1975 Management Plan. One alternative (No Action) retains existing management direction.

All action alternatives (Alternatives 2, 3, 4, 5, and 6) include management direction, desired future condition, and adopted Recreational Opportunity Spectrum (ROS) designations as described in Alternative 2 - Proposed Action, except for motorized recreational vehicle use, firearm use, access, commercial uses, and fish and wildlife protection, which varies for each action alternative. Commercial use allocation levels are also components of Alternatives 2, 3, 4, 5, and 6.

### **Common to All Alternatives**

Visual impacts are a prime consideration in the management of the Recreation Area due to the high visibility of the area. Common to all alternatives is the entire Recreation Area has been assigned a Visual Quality Objective of Retention. The Mendenhall Glacier, Mendenhall Lake and River, and the surrounding area have been rated Variety Class 'A', or having distinctive qualities inherent in the Coast Range Visual Character Type. The majority of the Recreation Area is visible in the foreground and middleground viewing distances of the Sensitivity Level 1 recreating public.

Under all alternatives, the following could occur:

- greater law enforcement presence and level of effort in order to help implement management direction as indicated (funding dependent)
- use of motorized vehicles (ORV's, motorized boats, helicopters, etc). for administrative use (e.g., law enforcement, search and rescue, cross-country ski track setting, trail or facilities maintenance, etc.)
- construction of a bike path along Glacier Spur Road connecting the Visitor Center parking lots to a bike path near Gladstone Avenue (funded and constructed by the Alaska State Department of Transportation and approval pending site specific NEPA analysis)
- Mendenhall Lake Campground managed by a concession; Mendenhall Glacier Visitor Center managed by a non-profit natural history/interpretive association
- possible entrance fee for the Visitor Center or the Recreation Area per Congressional direction

Forest Service Handbook 2509.22, Soil and Water Conservation Handbook, describes best management practices (BMP's) that are designed to minimize the adverse effects of management activities

on the soil and water resources, and to protect water related beneficial uses. These are BMP's that apply to all types of management activities that could impact aquatic habitats and water quality. These BMP's will be implemented with all management activities that take place in the Recreation Areas that may impact soil and water quality.

The following are the management direction priorities for the Recreation Area and would be the same for all alternatives.

- |                        |   |
|------------------------|---|
| <b>Priority One:</b>   | <b>Public health and safety (including law enforcement).</b>  |
| <b>Priority Two:</b>   | <b>Resource protection (including law enforcement).</b>   |
| <b>Priority Three:</b> | <b>Providing the following minimum level of recreation opportunities: Visitor Center would be open a minimum of two days per week during the winter season and a minimum of five days per week during the summer season; Mendenhall Lake Campground would be open a minimum from Memorial Day weekend to Labor Day weekend; maintenance would be done to assigned maintenance levels on West Glacier, East Glacier, Photo Point, Trail of Time, and Moraine Ecology trails.</b> |
| <b>Priority Four:</b>  | <b>Special Use Permit administration.</b>   |
| <b>Priority Five:</b>  | <b>Providing for other recreation and environmental education opportunities as described in the Mendenhall Glacier Recreation Area Management Plan.</b>   |
| <b>Priority Six:</b>   | <b>Glacier Spur Road bike path; Mendenhall Lake Campground concession operation.</b>  |

Common to all alternatives is defining firearms as shotguns, rifles, handguns, black powder rifles and pistols, BB guns, pellet guns, and pellet paint guns.

Also common to all alternatives is commercial use access to Mendenhall Lake at West Glacier Trailhead area only; Skater's Cabin, the Mendenhall Lake Campground and other beach areas are closed to commercial use. Commercial tours are not allowed at Skater's Cabin nor the Mendenhall Campground.

### **Common to Alternatives 2, 3, 4 and 6**

In response to public concerns about the impacts of increasing number of visitors to the Recreation Area, and to meet the overall management objectives for the area, a capacity analysis was developed for the Visitor Center, designated trails in the Recreation Area, and Mendenhall Lake and River. The analysis looked at the recreation experience to be provided based on Recreation Opportunity Spectrum (ROS) class (which describes the type of recreation experience managed for), the number of social encounters based on ROS class, physical site design capacities, and existing use data. Based on this analysis, overall total capacity levels for the Visitor Center, for Mendenhall Lake and River, and for designated trails were determined.

At the Visitor Center, the analysis also looked at expanded hours of operation and longer operating seasons to increase capacity, however, because of reduced federal budgets and constraints on staffing, an eight hour day was the base used to determine overall capacity. Overall capacity is also based on an average of one hour tour lengths. If tour length increased for the majority of commercial users, total capacity at the Visitor Center could be reduced.

Once total capacity was identified, a range of commercial use levels were then determined for Alternatives 2, 3, 4 and 5, for the Visitor Center and for Mendenhall Lake and Mendenhall River. For Alternative 2 - Proposed Action, the commercial use allocation level of 65% was based on the previous environmental analysis for the new Visitor Center expansion project, which showed that 65% of visitors were cruise ship visitors and 35% were independent travelers and local residents. For Alternative 3, the commercial use allocation level of 75% was based on commercial users requests for increased levels of use. For Alternative 4, the commercial use allocation level of 50% was based on the proposed revised TLMP recommendation of allocating 50% of capacity to commercial outfitter/guide use. For Alternative 5, commercial use was allocated based on the authorized 1995 commercial use levels in response to public comment that wanted to keep commercial use at existing levels. Alternative 1 - No Action addresses commercial use on a case-by-case basis. Alternative 6 is the same as Alternative 2 - Proposed Action.

For trails designated for commercial use, trail data shows that existing public use levels account for approximately 60% of capacity (USDA Forest Service, 1996c). Additionally, recent survey data from City and Borough of Juneau Parks and Recreation shows that the East and West Glacier trails are two of the three most visited trails along the Juneau road system (CBJ, 1995).

Under Alternatives 3, 4, and 6, commercial use levels for outfitter/guide hiking tours are allocated at 20% of capacity, so as not to preclude existing public use which is 60% of this capacity. Twenty percent for commercial use is one half of the remaining unused capacity, which also allows for increases in future non-commercial use as well. The range of commercial use levels was developed by designating three trails for commercial use (Alternative 3) and two trails for commercial use (Alternative 4). Under Alternative 5, the 1995 authorized commercial trail use levels were minimal (14 visitors/summer) and no commercial use allocations were made. In Alternative 1 - No Action and Alternative 2 - Proposed Action, commercial trail use is designated on a case-by-case basis. Alternative 6 is a combination of Alternatives 3 and 4, and includes mitigation measures to reduce conflicts between commercial and non-commercial users.

Also common to these alternatives is a correction to commercial use allocation levels made in the FEIS, correcting the original calculations presented in the DEIS to reflect 124 days in tour season length rather than 122 days.

Corrections are also made to calculations for Mendenhall Lake and River commercial allocation levels for Alternatives 2, 3, 4, and 6 in the FEIS. The DEIS capacity analysis considered the lake and river under different ROS classes, depending on the alternative. In the revised capacity analysis, only one ROS class is used, with commercial use allocated at 50%, 65%, and 75% of capacity. These percentages are now the same as those used for the Visitor Center allocation determinations.

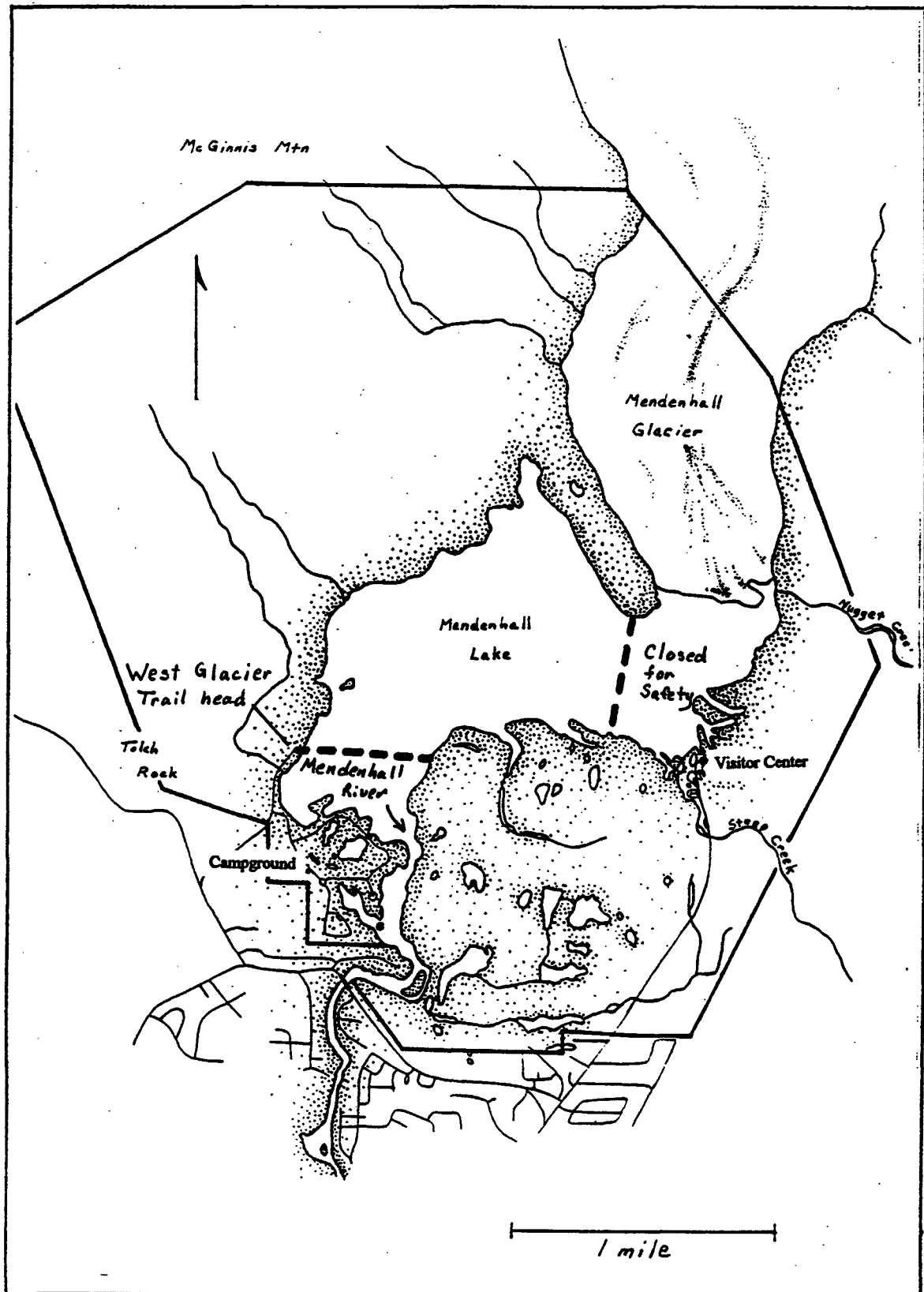
A copy of the full analysis is available in the Planning Record at the Juneau Ranger District.

### **Common to All Alternatives Except Alternative 1 - No Action**

Commercial use allocation levels apply only during the summer tour season (May 15 - September 15), when use is highest and impacts are most likely to occur. Winter season and "shoulder season" use (April 1 - May 15 and September 15 - October 31) are not under these allocation levels. Commercial use may also occur at these designated areas outside of this high use period without falling under allocation levels as long as adverse impacts are not occurring.

Also common to these alternatives is defining Mendenhall Lake, for purposes of allocating commercial use levels, as the area northwest of the West Glacier Trailhead and east to the tip of the rock outcrop near the face of the glacier. Mendenhall River, for purposes of allocating commercial use levels, is defined as the lake area directly east of the West Glacier Trailhead and downriver to Back Loop Bridge (see Map 2).

**Map 2. Mendenhall Lake and Mendenhall River commercial use areas.**



## **ALTERNATIVE 1 - No Action**

Under this alternative there would be no changes to the current management plan and the 1975 Management Plan would remain in effect. The Recreation Area would continue to be managed for high concentrations of use at the Visitor Center, Mendenhall Lake Campground, Mendenhall Lake, and Mendenhall River and for low concentrations of use throughout the rest of the Recreation Area. All current uses would continue in the areas where they are permitted. This alternative serves as the baseline for comparison for the action alternatives, and is required by NEPA.

Listed below is a summary of the existing plan and how it relates to the significant issues (see Map 3).

### **Motorized Recreational Vehicle Use.**

- ORV's and snowmobiles would continue to be allowed on the west side of Mendenhall Lake when frozen.
- The Mendenhall Lake Campground would continue to allow ORV's and snowmobiles on 2.5 miles of road when roads are closed to normal vehicle traffic and there is twelve inches or more of snow.
- Motorized recreation vehicle use would continue to be permitted in the Dredge Lake Unit. This would provide 7.8 miles of trail available for motorized use.
- Motorized model airplane use would continue to be allowed in the Dredge Lake Unit with no vegetation removal or permanent structures.
- Motorized boats would continue to be allowed on the west side of Mendenhall Lake and on Mendenhall River, but there would be no developed public access.

### **Firearm Use.**

- McGinnis Mountain would continue to be open to shotgun use.
- Shotgun use would continue to be allowed during waterfowl and snowshoe hare seasons (September 1 to April 30) only in the Moraine Lake Unit. However, a majority of this unit is closed by State or City regulation to shooting or hunting (see Chapter 1, Section I - Other Laws and Regulations, and Map 4).

### **Commercial Uses.**

- Outfitter/guide tours would continue to be allowed with a case-by-case analysis of environmental effects.
- Uses incompatible with area values would not be permitted.
- No commercial allocation levels currently established.
- Commercial concession facilities would continue to be prohibited.

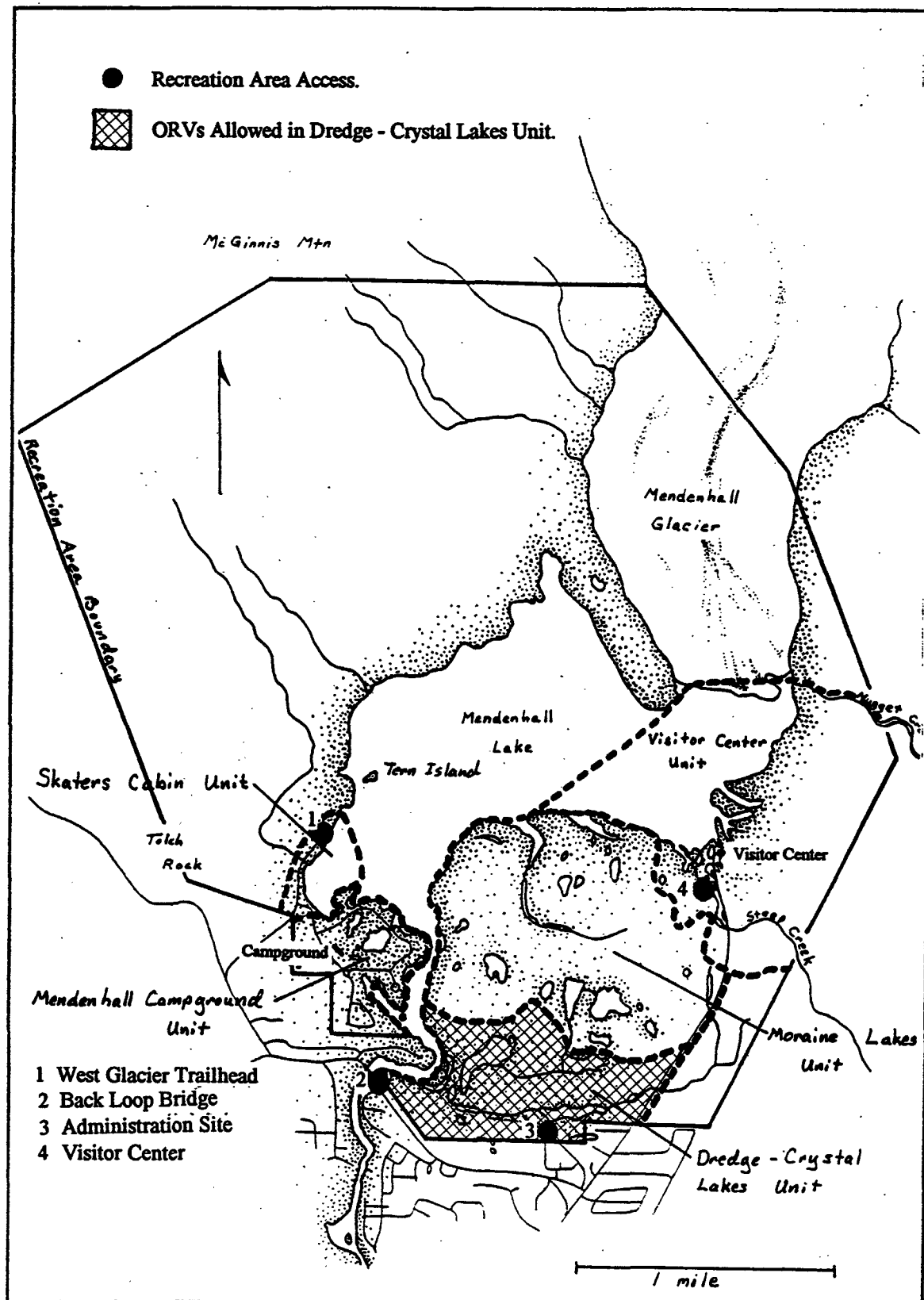
### **Access (See Chapter 3 for a description of current access points)**

- Visitor Center parking lots would continue to be available for non-motorized access.
- West Glacier Trailhead would continue to be available for non-motorized access.
- Gladstone Avenue Trailhead would continue to be available for non-motorized access.
- Back Loop Bridge Trailhead would continue to be available for access by all users.
- Dredge Lake Road Trailhead would continue to be available for access by all users.
- Except for the Mendenhall Lake Campground, the Recreation Area would be closed from midnight to 6 a.m.

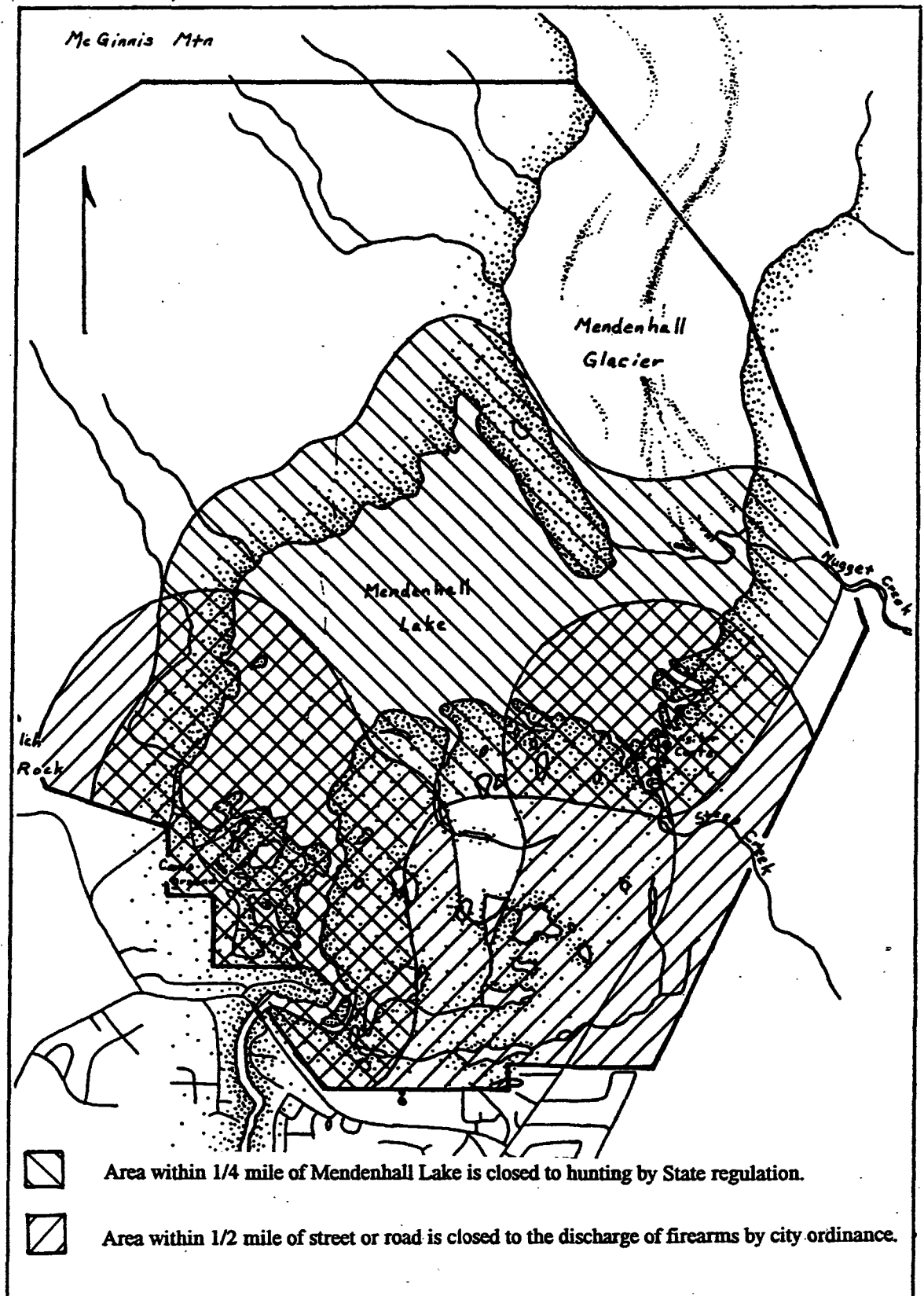
### **Fish and Wildlife.**

- Fish and wildlife viewing would continue to be emphasized.
- Coordinate protection with Alaska Department of Fish and Game.
- Tern nesting area off of the West Glacier Trail, locally known as Tern Island, would continue to be protected.

## Map 3. Alternative 1 - No Action.



**Map 4. City and State restrictions on firearms discharge and hunting within the Recreation Area.**



## ALTERNATIVE 2 - Proposed Action

The objective of this alternative is to reduce recreation user conflicts between motorized recreation vehicles, firearms, and other recreation uses (see Map 5). The Recreation Area would be managed for high concentrations of use at the Visitor Center and Mendenhall Lake Campground, for moderate concentrations of use at Skater's Cabin, West Glacier Trailhead, and on Mendenhall River, and low concentrations of use on Mendenhall Lake and throughout the rest of the Recreation Area.

### **Motorized Recreational Vehicle Use.**

- Motorized recreational vehicles would be allowed on the west side of Mendenhall Lake when frozen.
- ORV's and snowmobiles would not be allowed on the 2.5 miles of road within the Mendenhall Lake Campground except for administrative use.
- ORV's and snowmobiles would be prohibited in all other locations within the Recreation Area.
- Motorized model airplane use would be allowed in the Dredge Lake Unit with no vegetation removal or permanent structures.
- Motorized boat use would be allowed on the west side of Mendenhall Lake and on Mendenhall River, but there would be no developed public access.

### **Firearm Use.**

- The Recreation Area would be closed to all firearm use.

### **Commercial Use.**

- The following criteria for authorization of commercial use would apply under this alternative:
  - a) Commercial use must be compatible with area values of furthering the understanding and enjoyment of glacial phenomena.
  - b) Use must not detract from the natural environment.
  - c) Commercial concession facilities (including food and beverage services) would continue to be prohibited (same as Alternative 1 - No Action).
  - d) Commercial use would promote interpretation or education of natural or glacial features, or historic or cultural values.
  - e) Commercial harvest of ice, plants, animals, soils, or rocks would not be allowed, except for the sale of gravel associated with fisheries enhancement projects.
  - f) Approved commercial uses would be authorized by special use permit, and comply with all conditions of the permit, including emphasis on training and use of ethical fish & wildlife viewing techniques by permit holder and holder's representatives.

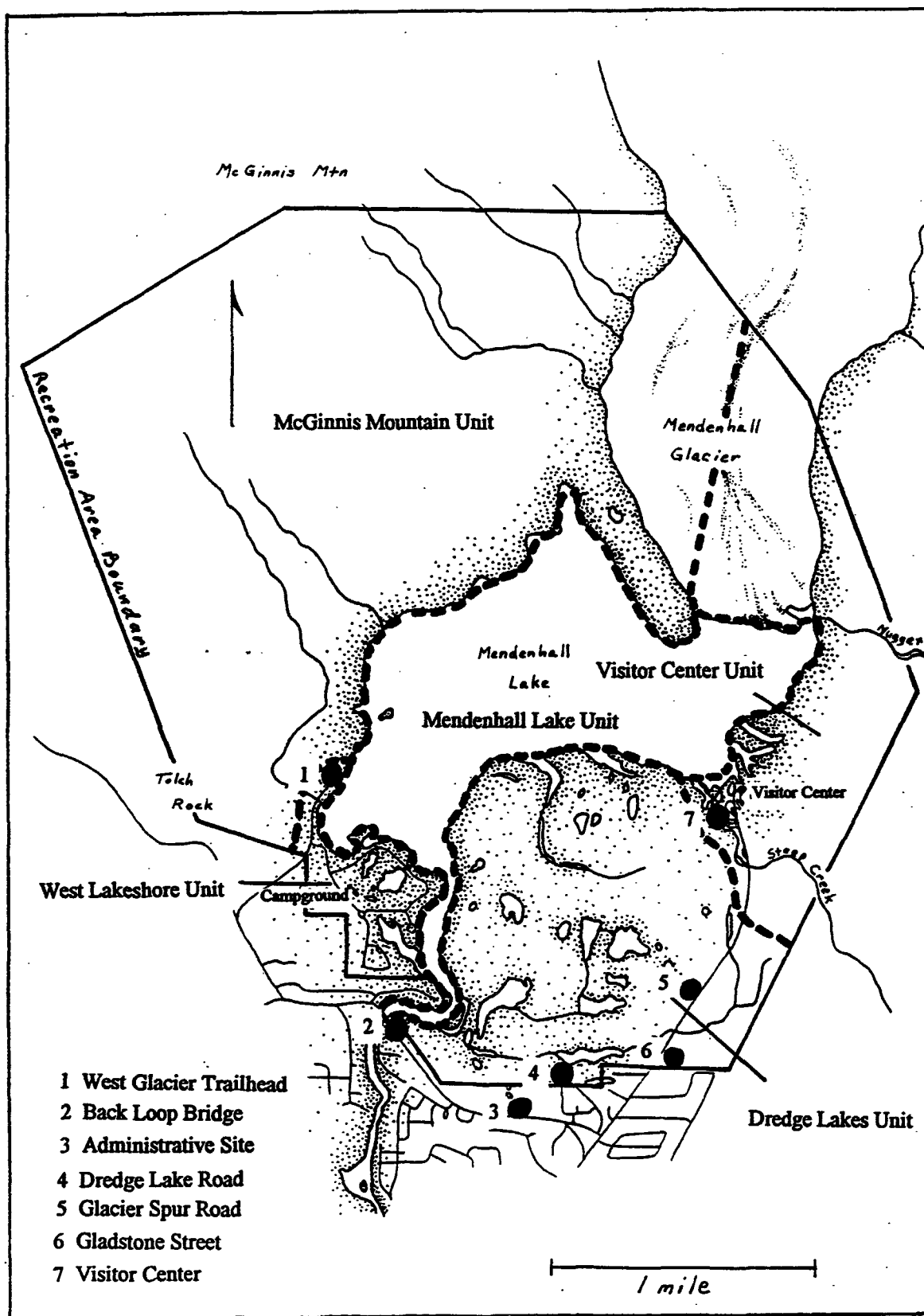
Examples of prohibited commercial facilities would be (but not limited to) bar, hotel, aerial tram, vista lodge, food or beverage carts or concessions, still or video photo concessions, gift or recreational equipment concessionaires.

Examples of prohibited commercial developments would be (but not limited to) winter sports area, rifle range, golf course, fish hatchery, ice skating rink, and tramway.

Examples of allowed commercial uses would be (but not limited to) bus tours, rafting tours, canoe tours, kayak tours, taxi tours, minivan tours, bicycle tours, outfitter/guide hikes or walks, commercial still photography (e.g., advertising), one-time media events (e.g., Wheel of Fortune, Good Morning America), and motion picture film production.



# Map 5. Alternative 2 - Proposed Action.



- Special events would be allowed in the Recreation Area. Special event use which falls outside of Forest Service non-commercial group use regulations, and which meets all of the following criteria could be authorized on a case-by-case basis:
  - a) Non-profit only.
  - b) Use of existing facilities, roads or trails.
  - c) No interference with other public use.
  - d) No adverse changes or impacts.
  - e) No food or beverage services.
  - f) Compliance with standard special use permit conditions such as (but not limited to) insurance requirements, sanitation, non-discrimination policies.

Examples of allowed special event uses would be (but not limited to) weddings, funerals, foot races, walk-a-thons, square dances, organized fun runs and dog walks, and religious holiday services.

- Commercial use allocation limits at 65% of capacity for the Visitor Center and Mendenhall Lake and River. Case-by-case basis for commercial trail use.
- Commercial use allocation levels at the Visitor Center would be established at 246,570 visitors per summer. Once the Visitor Center expansion project is completed, commercial use allocation levels would be established at 462,190 visitors per summer. Allowed commercial uses would be bus, minivan, car, taxi, limousine, and bike tours, package trips, charters, and point-to-point transportation.
- Commercial use allocation levels for commercial rafting, canoeing, and kayaking tours on Mendenhall Lake would be 2,980 visitors per summer and on Mendenhall River 38,190 visitors per summer (see Map 2).
- No commercial use allocation levels for trail use in the rest of the Recreation Area. Outfitter/guide requests would be analyzed on a case-by-case basis.

**Access.**

- Visitor Center parking lots would be available for non-motorized access.
- West Glacier Trailhead would be available for non-motorized access.
- Back Loop Bridge Trailhead could be considered for reconstruction and maintenance, dependent on site-specific NEPA analysis.
- Dredge Lake Road Trailhead would be available for non-motorized access.
- A new trailhead off of the Glacier Spur Road could be considered, construction dependent on site-specific NEPA analysis.
- A new trailhead could be considered at the Administrative Site, construction dependent on site-specific NEPA analysis.
- Construction of an emergency vehicle access to Mendenhall River near the Back Loop Road Bridge could be considered.
- Except for the Mendenhall Lake Campground, the Recreation Area would be closed from midnight to 6 a.m.

**Fish and Wildlife.**

- Ethical fish and wildlife viewing would be emphasized. Sport fish and wildlife enhancement projects could be implemented.
- If impacts are detected, additional protection measures may be implemented.

**ALTERNATIVE 3**

This alternative was developed in response to public comments on the Proposed Action and allows for a wider variety of recreational opportunities than Alternative 1 - No Action. Motorized recreational vehicle use would be permitted in designated areas. Construction of new trailheads off of the Back Loop Road and the Glacier Spur Road would be considered to minimize motorized recreational vehicle disturbance to the neighborhoods that border the Recreation Area. Firearm use would be

permitted during hunting season in the Dredge Lakes Unit and on McGinnis Mountain (see Map 6). The Recreation Area would be managed for high concentrations of people at the Visitor Center, Mendenhall Lake Campground, and on Mendenhall River, moderate concentrations of people at Skater's Cabin and West Glacier Trailhead, and low to moderate concentrations of use throughout the rest of the Recreation Area.

#### **Motorized Recreational Vehicle Use.**

- ORV's and snowmobiles would be allowed on the west side of Mendenhall Lake when frozen.
- ORV's and snowmobiles would not be allowed on the 2.5 miles of road within the Mendenhall Lake Campground except for administrative use.
- A 3.13 mile loop trail designated and signed for motorized use would be developed in the Dredge Lakes Unit with new motorized trailheads at the Administrative Site and Glacier Spur Road. Also, the 17.5 acre gravel pit area in the Dredge Lakes Unit would be available for ORV use.
- ORV's and snowmobiles would be allowed on designated trails in the Dredge Lakes Unit when there is twelve inches or more of snow.
- An annual ORV and snowmobile permit would be required. Users would have to show proof of attending a safety orientation session. An American Safety Institute safety training area would be developed for ORV users.
- Motorized model airplane use would be the same as Alternatives 1 - No Action.
- Motorized boat use would be allowed only on the west side of Mendenhall Lake and on Mendenhall River with a "no wake" rule; airboats, jet boats, jetskis, and hovercraft would not be allowed.

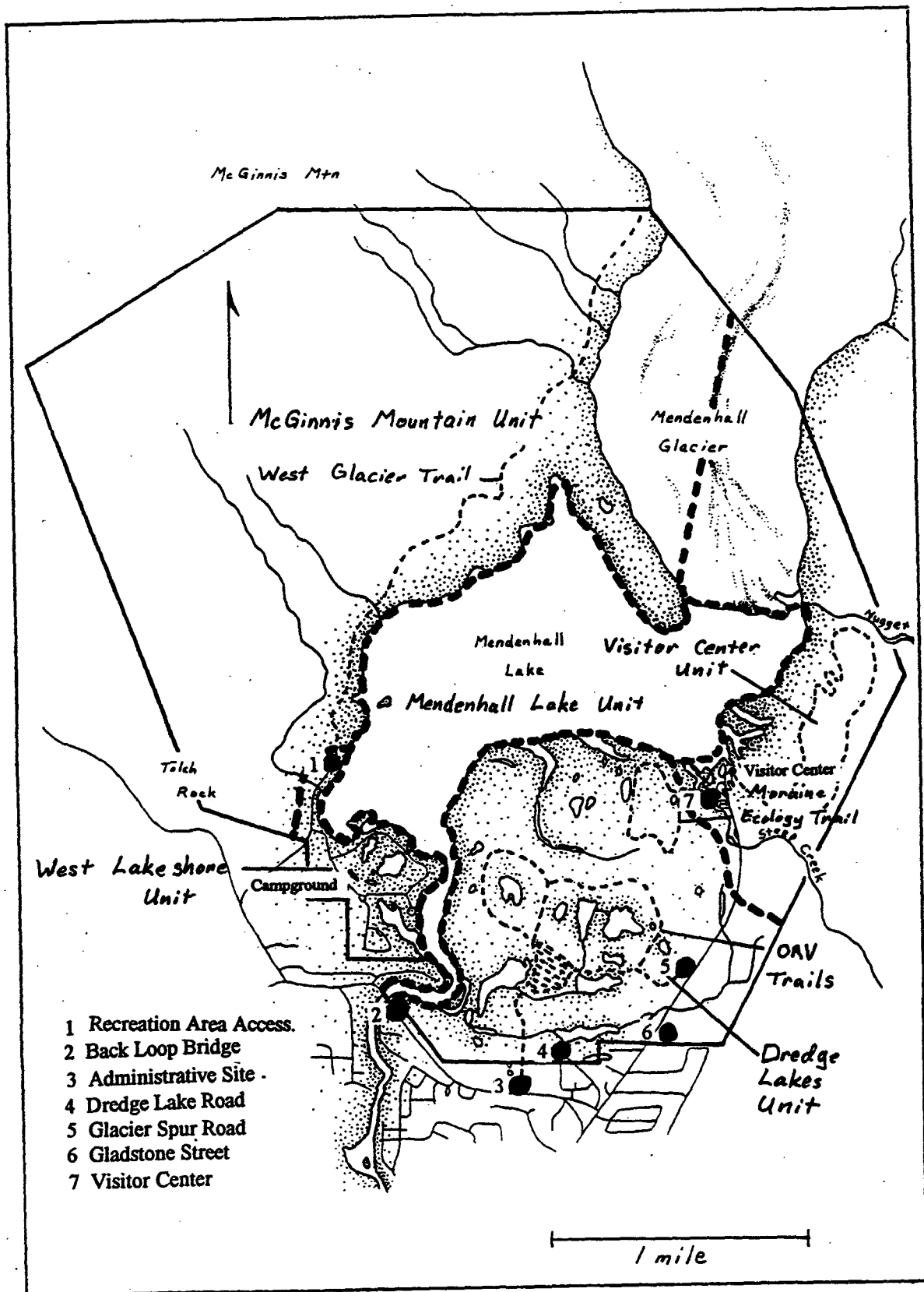
#### **Firearm Use.**

- McGinnis Mountain Unit would be open for shotgun and rim-fire .22 caliber rifle use.
- Shotguns would be allowed in Dredge Lakes Unit during waterfowl and snowshoe hare season (September 1 to April 30), within existing State and City regulations.

#### **Commercial Use.**

- Commercial and special event Special Use Permits criteria would be the same as Alternative 2 - Proposed Action.
- Commercial use allocation limits at 75% of capacity for the Visitor Center and Mendenhall Lake and River, and at 20% of capacity for East Glacier Trail, West Glacier Trail and the Moraine Ecology Trail.
- Commercial use allocation levels at Visitor Center would be established at 284,500 visitors per summer. Once the Visitor Center expansion project is completed, commercial use allocation levels would be 533,300 visitors per summer.
- Outfitter/guide hiking tours would be permitted on three trails: West Glacier Trail, East Glacier Trail and the Moraine Ecology Trail. Commercial use allocation levels would be established for commercial use at 48 people per day on each trail, with a maximum group size of twelve. Total trail allocation levels could be 5,950 people per trail per summer on West Glacier Trail, on East Glacier Trail, and on the Moraine Ecology Trail.
- Outfitter/guide raft, canoe, kayak and other boat tours would be allowed on Mendenhall Lake and River, including motorized boat tours that meet motorized recreational use criteria as noted above for Alternative 3. Commercial use allocation levels would be 3,720 visitors per summer on Mendenhall Lake and 43,030 visitors per summer on Mendenhall River.
- Commercial concession facilities or services (including food/beverage services) would be permitted if they meet established criteria in Alternative 2 - Proposed Action, including bonafide public need. All commercial concession facilities or services would be reviewed on an annual basis to determine if continued use is appropriate and meeting established criteria.

Map 6. Alternative 3.



#### **Access**

- Visitor Center parking lots would be available for non-motorized access.
- West Glacier Trailhead would be available for non-motorized access.
- Back Loop Bridge Trailhead would be available for non-motorized access.
- Dredge Lake Road Trailhead would be available for non-motorized access.
- A new trailhead for ORV access could be considered off of Glacier Spur Road, construction dependent on site-specific NEPA analysis.
- A new trailhead for ORV access could be considered near the Administrative Site, construction dependent on site-specific NEPA analysis.
- Construction of an emergency vehicle access to Mendenhall River near the Back Loop Road Bridge could be considered.
- City and Borough of Juneau could be authorized, pending site specific NEPA analysis, to develop five maintenance and emergency vehicle turnarounds. The locations of these would be at the ends of Terrence Place, Dredge Lake Road, Gladstone Street (both ends) and Trafalger Avenue. (see Map 7)
- Other boat users would be allowed vehicle access to off-load behind the gate now used by Alaska Travel Adventures on the west side of Mendenhall Lake.
- The Recreation Area would remain closed from midnight to 6 a.m. except in Mendenhall Lake Campground and on McGinnis Mountain, where overnight camping would be allowed 100 yards or more northwest of West Glacier Trail.

#### **Fish and Wildlife.**

- Ethical fish and wildlife viewing would be emphasized. Sport fish and wildlife enhancement projects could be implemented.
- If impacts are detected, additional protection measures may be implemented.

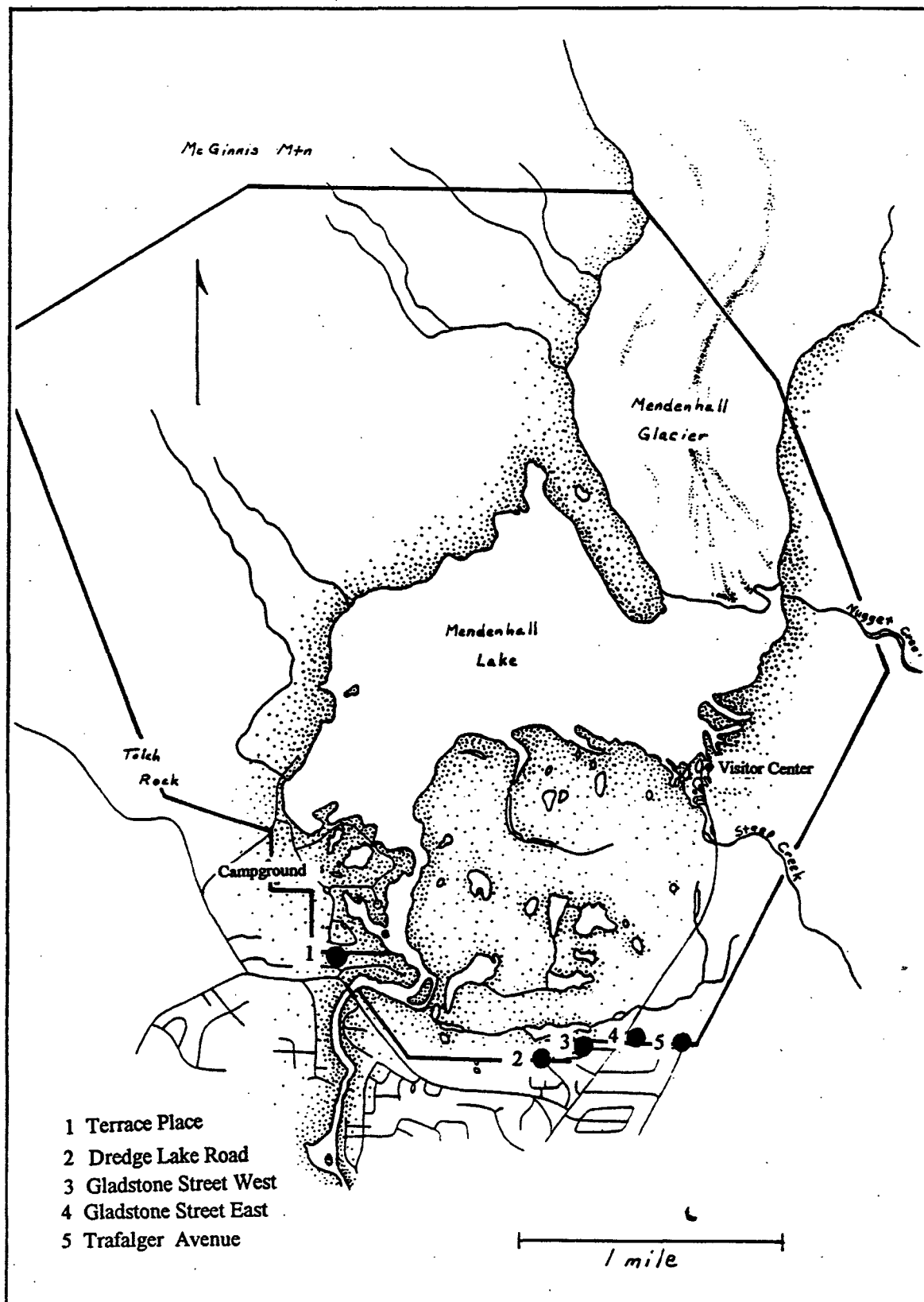
### **ALTERNATIVE 4**

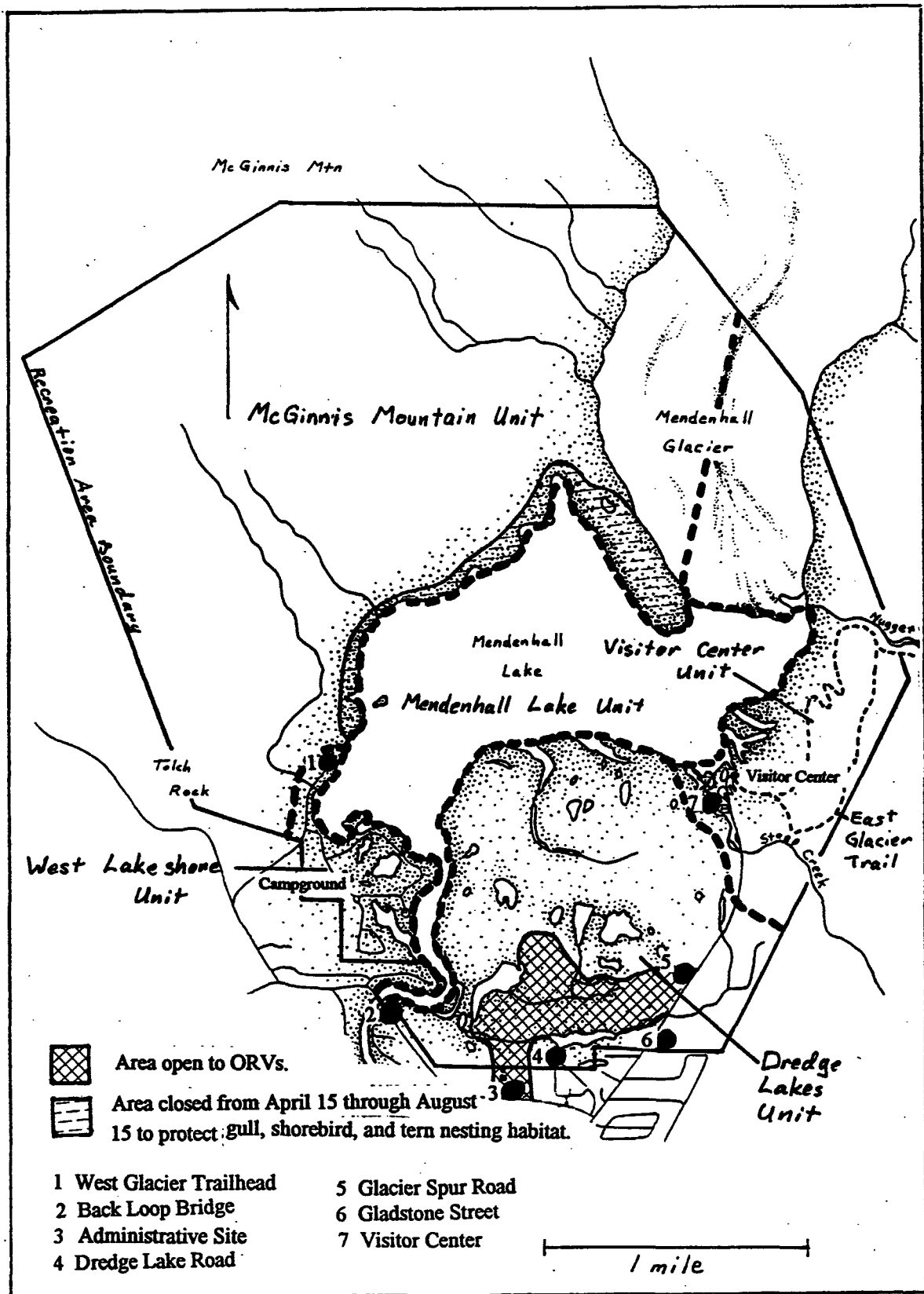
This alternative was also developed in response to public comments on the Proposed Action. Rather than limiting motorized recreational vehicle use to designated trails, this alternative would set aside an area for such uses. Other recreational users would be advised of the designated area and be encouraged to use adjacent areas. In the area designated for motorized recreational use, that use would have preference over non-motorized uses. This alternative would limit firearm use to the McGinnis Mountain Unit and also impose restrictions on recreational use to protect wildlife, birds and waterfowl (see Map 8). The Recreation Area would be managed for high concentrations of people at the Visitor Center, Mendenhall Lake Campground, moderate concentrations of use at West Glacier Trailhead, Skater's Cabin and on Mendenhall River, and low concentrations of use on Mendenhall Lake and throughout the rest of the Recreation Area.

#### **Motorized Recreational Vehicle Use.**

- ORV's and snowmobiles would be allowed on the west side of Mendenhall Lake when frozen.
- ORV's and snowmobiles would not be allowed on the 2.5 miles of road within the Mendenhall Lake Campground except for administrative use.
- Designated and signed ORV area in Dredge Lakes Unit with new motorized trailhead at Glacier Spur Road. This would provide 7.8 miles of ORV trail and 144 acres of ORV area.
- ORV's and snowmobiles would be allowed in designated ORV area in Dredge Lakes Unit when there is twelve inches or more of snow on the ground.
- ORV and snowmobile permit would be required (same as Alternative 3).
- Motorized model airplane use would be allowed in the Dredge Lakes Unit with no vegetation removal or permanent structures.
- No motorized boats would be allowed on Mendenhall Lake or on Mendenhall River within the Recreation Area.

**Map 7. Alternative 3 - City and Borough of Juneau emergency vehicle turnarounds.**





**Firearm Use.**

- McGinnis Mountain Unit would be open to shotgun and rim-fire .22 caliber rifle use during grouse and ptarmigan season, and within city and state regulations. All other units would be closed to firearm use.

**Commercial Use.**

- Commercial use and special event Special Use Permits criteria would be same as Alternative 2 - Proposed Action.
- Commercial use allocation limits at 50% of capacity for the Visitor Center and Mendenhall Lake and River, and at 20% of capacity for East Glacier Trail and Nugget Creek Trail.
- Commercial use allocation levels for commercial use at Visitor Center would be established at 189,670 visitors per summer. Once the Visitor Center expansion project is completed, commercial use allocation levels would be 355,530 visitors per summer.
- Outfitter/guide hiking tours would be permitted only on two trails; East Glacier Trail and Nugget Creek Trail. Commercial use allocation levels for commercial use would be limited to 48 people per day on East Glacier Trail and 24 per day on Nugget Creek Trail, with a maximum group size of twelve. Total commercial use allocation levels would be 5,950 visitors per summer on East Glacier Trail and 2,980 visitors per summer on Nugget Creek Trail.
- Outfitter/guide rafting, canoeing and kayaking and other boat tours would be allowed on Mendenhall Lake and Mendenhall River. Commercial allocation levels would be established at 1,860 visitors per summer for Mendenhall Lake and at 31,000 visitors per summer for Mendenhall River.
- Commercial concession facilities would not be permitted.

**Access.**

- Visitor Center parking lots would be available for non-motorized access.
- West Glacier Trailhead would be available for non-motorized access.
- Back Loop Bridge Trailhead would be available for non-motorized access.
- Dredge Lake Road Trailhead would be available for non-motorized access.
- A new trailhead for ORV access could be considered off of Glacier Spur Road, construction dependent on site-specific NEPA analysis.
- A new trailhead for ORV access could be considered near the Administrative Site, construction dependent on site-specific NEPA analysis.
- Construction of an emergency vehicle access to Mendenhall River near the Back Loop Road Bridge could be considered.
- Except for the Mendenhall Lake Campground, the Recreation Area would be closed from midnight to 6 a.m.

**Fish and Wildlife.**

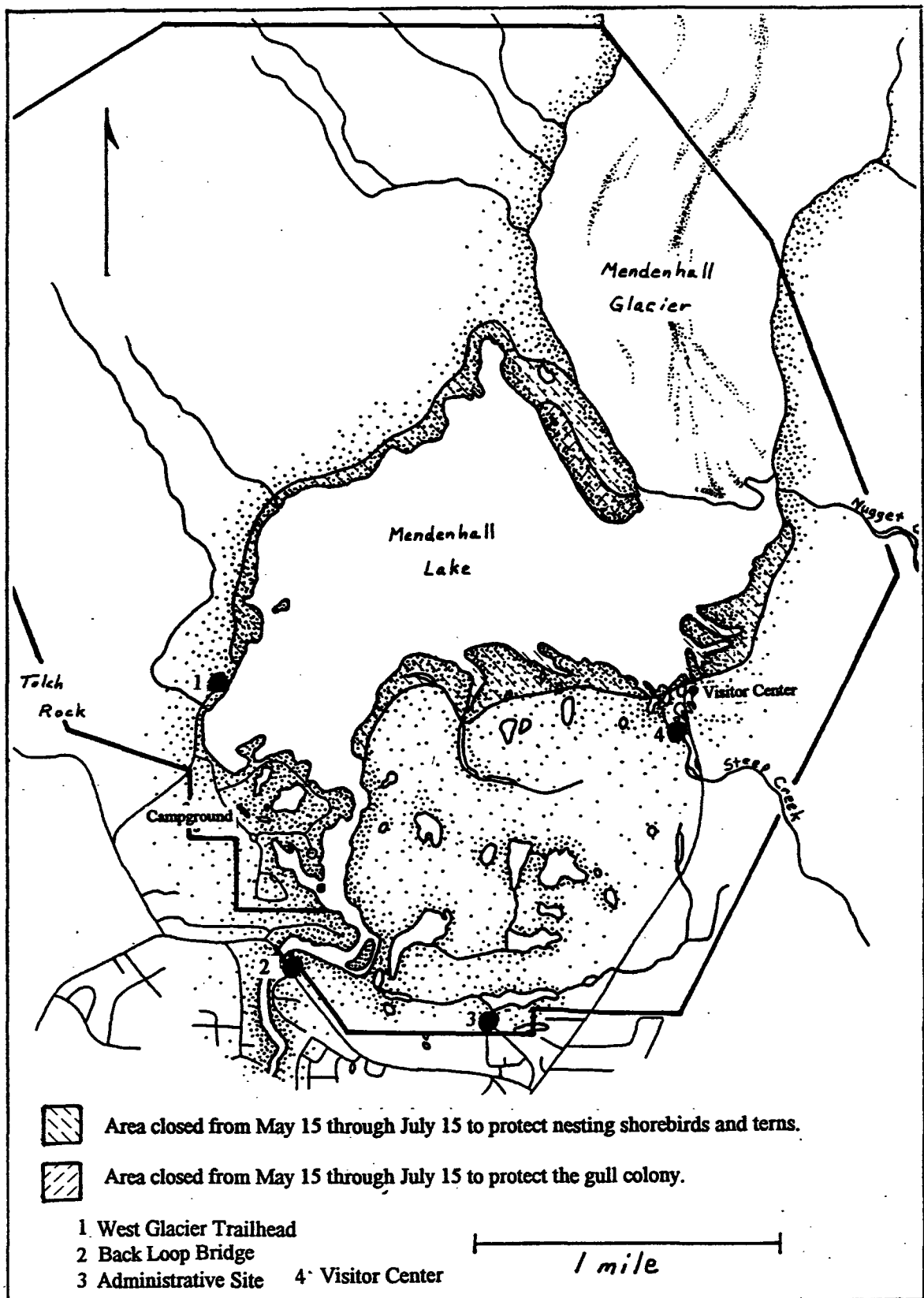
- Ethical fish and wildlife viewing would be emphasized. Sport fish and wildlife enhancement projects could be implemented.
- If impacts are detected, additional protection measures may be implemented.
- The west side of Mendenhall Lake would be closed to all use from May 15 through July 15 to protect nesting arctic terns.
- The rock outcrop near the west face of Mendenhall Glacier would be closed to all use from May 15 through July 15 to protect nesting gulls.

**ALTERNATIVE 5**

This alternative emphasizes protective measures for wildlife, birds, and migratory waterfowl. In order to protect the habitat necessary for wildlife, especially during sensitive nesting seasons, this alternative would be the most restrictive on all recreation uses (see Map 9). The Recreation Area would be managed for high concentrations of people at the Visitor Center, Mendenhall Lake Campground, and



# Map 9. Alternative 5.



on Mendenhall River, and for low to moderate concentrations of use on Mendenhall Lake and throughout the rest of the Recreation Area.

**Motorized Recreational Vehicle Use.**

- The Recreation Area would be closed to all off-road motorized recreational vehicle use including ORV's, snowmobiles, model airplanes and motorized boats.

**Firearm Use.**

- All units would be closed to firearm use.

**Commercial Use.**

- More specific criteria for commercial and special event Special Use Permits would be established, as listed in Alternative 2 - Proposed Action.
- Commercial use allocation limits at 1995 authorized levels for the Visitor Center and Mendenhall Lake and River.
- No new commercial tour or outfitter/guide operations would be authorized, and existing commercial tours would be limited to 1995 use levels.
- Commercial use allocation levels at the Visitor Center would be 179,748 visitors per summer and would remain at this level, even after the Visitor Center expansion project is completed.
- No outfitter/guide hiking would be authorized.
- Outfitter/guide rafting, canoeing, and kayaking tours only would be allowed on Mendenhall Lake and River. Commercial use allocation levels would be established at 1995 levels which are 160 visitors per summer on Mendenhall Lake and 25,700 visitors per summer on Mendenhall River.
- Commercial concession facilities would not be permitted.

**Access.**

- Visitor Center parking lots would be available for non-motorized access.
- West Glacier Trailhead would be available for non-motorized access.
- Gladstone Avenue Trailhead would be available for non-motorized access.
- Back Loop Bridge Trailhead could be considered for reconstruction and maintenance, dependent on site-specific NEPA analysis.
- Dredge Lake Road Trailhead would be closed to all uses.
- No new access points developed.
- The Recreation Area would be closed from midnight to 6 a.m., except for the Mendenhall Lake Campground.

**Fish and Wildlife.**

- Ethical fish and wildlife viewing would be emphasized. Sport fish and wildlife enhancement projects could be implemented.
- If impacts are detected, additional protection measures may be implemented.
- No use along the west shoreline of Mendenhall Lake from May 15 through July 15 to protect nesting arctic terns.
- The rock outcrop near the west face of Mendenhall Glacier would be closed to public access from May 15 through July 15 to protect nesting gulls.
- No use along the south shoreline of Mendenhall Lake from May 15 through July 15 to protect nesting shore birds and waterfowl.

## **ALTERNATIVE 6**

This alternative was developed in response to public comments on the DEIS and consists of components from Alternatives 2, 3, and 4. ORV use in the Recreation Area would be prohibited except for ORV and snowmobile winter use on the west side of Mendenhall Lake. Use of firearms would be allowed in the Dredge Lake Unit and McGinnis Mountain Unit during hunting season. Dispersed,

undeveloped camping would be allowed on McGinnis Mountain, 100 yards northwest of West Glacier Trail. The Recreation Area would be managed for high concentrations of use at the Visitor Center and Mendenhall Lake Campground, for moderate concentrations of use at West Glacier Trailhead, Skater's Cabin, and on Mendenhall River, and low concentrations of use on Mendenhall Lake and throughout the rest of the Recreation Area (see Map 10).

#### **Motorized Recreational Vehicle Use**

- Motorized recreational vehicles use would be allowed on the west side of Mendenhall Lake when frozen.
- ORV's and snowmobiles would not be allowed on the 2.5 miles of road in Mendenhall Lake Campground except for administrative use.
- ORV's and snowmobiles are prohibited in the rest of the Recreation Area.
- Motorized model airplane use would be allowed in the Dredge Lakes Unit with no vegetation removal or permanent structures.
- Motorized boat use would not be allowed on Mendenhall Lake or Mendenhall River within the Recreation Area.

#### **Firearm Use**

- McGinnis Mountain would be open to shotguns and .22 caliber rim-fire rifles during ptarmigan and grouse hunting seasons, within City and Borough of Juneau and State regulations.
- Dredge Lake Unit would be open to shotgun use during waterfowl and rabbit hunting season, within City and Borough of Juneau and State regulations.

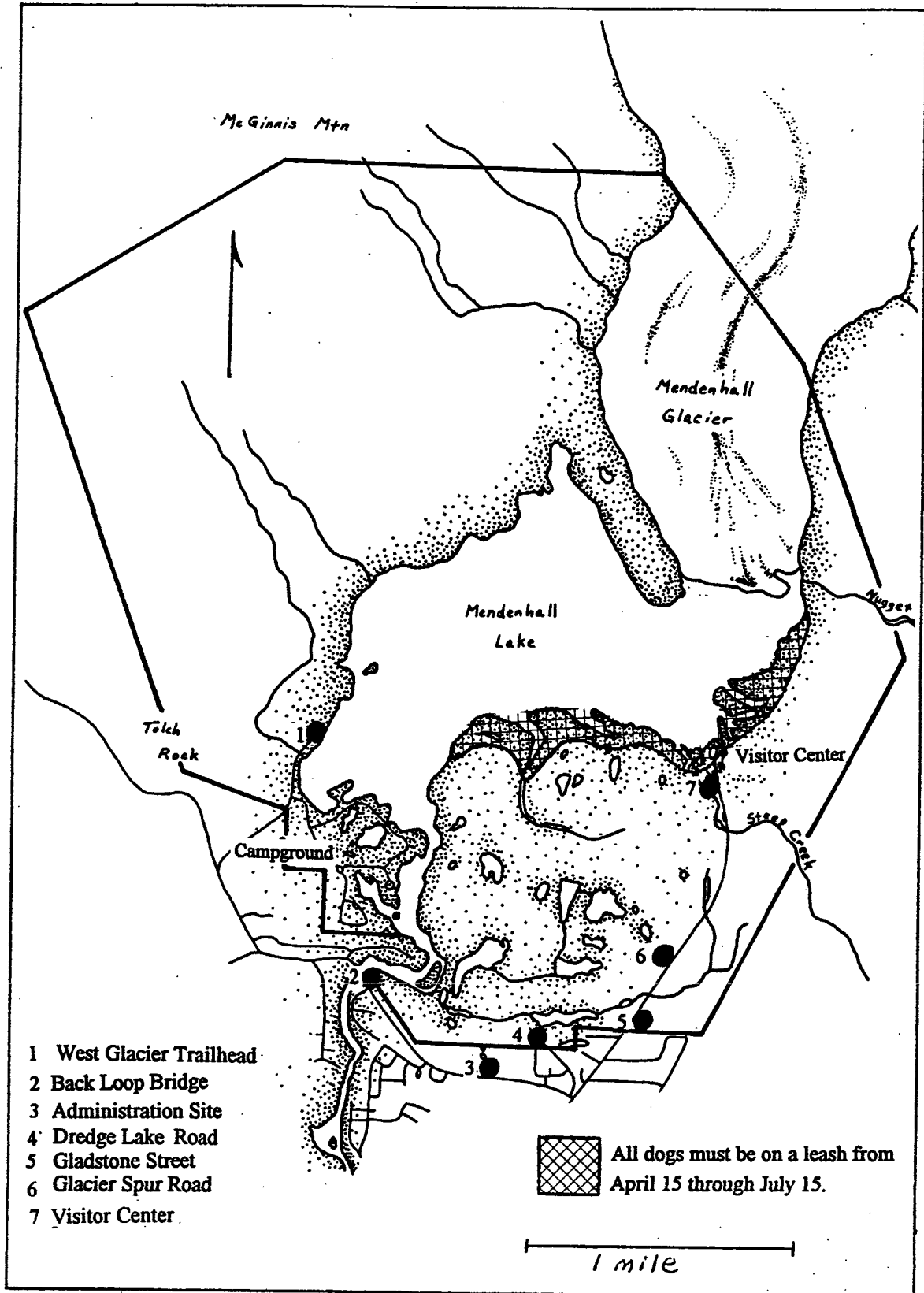
#### **Commercial Use**

- More specific criteria for commercial and special event Special Use Permits would be established as listed in Alternative 2 - Proposed Action.
- Commercial use allocation limits at 65% of capacity for the Visitor Center and Mendenhall Lake and River, and 20% of capacity for East Glacier Trail, Nugget Creek Trail and West Glacier Trail.
- Commercial use allocation levels for commercial use at the Visitor Center would be established at 246,570 visitors per summer and would be increased to 462,190 visitors per summer when the Visitor Center expansion project is completed.
- Commercial use allocation levels would be established for outfitter/guide hiking on East Glacier, Nugget Creek and West Glacier trails. No outfitter/guide hiking on other trails. Group size limited to twelve people.
- Outfitter/guide hiking on East Glacier Trail allowed with 48 persons per day in four groups for a total of 5,950 visitors per summer; on Nugget Creek Trail, 24 persons per day allowed for a total of 2,980 visitors per summer; and on West Glacier Trail, 48 persons allowed per day, weekdays only, for a total of 4,220 visitors per summer. Outfitter/guide hiking on West Glacier Trail is restricted to trail only. No commercial use allowed on rock outcrop near glacier.
- Outfitter/guide commercial use allocation levels on Mendenhall Lake established at 24 persons per day, or 2,980 visitors per summer, and on Mendenhall River at 308 persons per day, or 38,190 visitors per summer. No commercial use allowed on rock outcrop near glacier.
- Commercial concession facilities would not be permitted.

#### **Access**

- Visitor Center parking lots would be available for non-motorized access.
- West Glacier Trailhead would be available for non-motorized access.
- Back Loop Bridge Trailhead would be available for non-motorized access.
- Dredge Lake Road Trailhead would be available for non-motorized access.
- A new trailhead could be considered off of Glacier Spur Road, construction dependent on site-specific NEPA analysis.

Map 10. Alternative 6.



- A new trailhead could be considered near the Administrative Site, construction dependent on site-specific NEPA analysis.
- Construction of an emergency vehicle access to Mendenhall River near the Back Loop Road Bridge could be considered.
- City and Borough of Juneau could be authorized, pending site specific NEPA analysis, to develop five maintenance and emergency vehicle turnarounds. The locations of these would be at the ends of Terrence Place, Dredge Lake Road, Gladstone Street (both ends) and Trafalger Avenue. (see Map 7)
- Other boat users would be allowed vehicle access to off-load behind the gate now used by Alaska Travel Adventures on the west side of Mendenhall Lake.
- The Recreation Area would remain closed from midnight to 6 a.m. except in Mendenhall Lake Campground and on McGinnis Mountain, where overnight camping would be allowed 100 yards northwest of West Glacier Trail.

#### **Fish and Wildlife**

- Ethical fish and wildlife viewing would be emphasized. Sport fish and wildlife enhancement projects could be implemented.
- If impacts are detected, additional protection measures may be implemented.
- Special Use Permits would have approach distance stipulations to protect nesting gulls on the rock outcrop area near the face of Mendenhall Glacier.
- Information and education would be used to educate users about protecting nesting shorebirds and waterfowl along the south and west shores of Mendenhall Lake.
- Dogs must be on-leash along the south and west shores of Mendenhall Lake from April 15 through July 15 to protect shorebirds and waterfowl.

### **E. Comparison of Alternatives**

The comparison of alternatives draws together the materials presented throughout the document and provides the results of the analysis in summary form. Each issue is addressed in the alternatives.

Table 2-1. Comparison of Alternative by Component

Issue	Alternative 1 No Action	Alternative 2 Proposed Action	Alternative 3	Alternative 4	Alternative 5	Alternative 6
<b>Motorized Recreation Vehicle Use</b>	ORV and snowmobile use on west side of Mendenhall Lake when frozen; ORV and snowmobile use in Mendenhall Campground; ORV and snowmobile use in Dredge Lakes Unit; model airplane use allowed without vegetation removal; motorized boats allowed on west side of Mendenhall Lake with no developed access.	ORV's prohibited, except for ORV and snowmobile use allowed on west side of Mendenhall Lake when frozen; ORV and snowmobile use in campground prohibited except for administrative use; model airplanes and motorized boats same as Alt. 1.	ORV and snowmobile winter use on west side of Mendenhall Lake when frozen and on designated ORV trails; ORV and snowmobile winter use in campground same as Alternative 2; ORV permit required; model airplanes same as Alt.1; motorized boat use only on west side of Mendenhall Lake and River with "no wake" rule; airboats, jet skis, jet boats and hovercraft not allowed.	ORV and snowmobile winter use on west side of Mendenhall Lake when frozen and in ORV area; ORV and snowmobile winter use in Mendenhall Campground same as Alternative 2; designated ORV area in Dredge Lakes Unit accessed from Glacier Spur Road; ORV permits required; model airplanes same as Alt 1; no motorized boats on Mendenhall Lake and on Mendenhall River within the Recreation Area.	Closed to all motorized recreational vehicle use including ORV's, snowmobiles, model airplanes and motorized boats.	ORV and snowmobile use same as Alternative 2; ORV and snowmobile winter use same as Alternative 2; model airplanes use same as Alt.1; motorized boat use same as Alternative 4.

Table 2-1. Comparison of Alternative by Component (continued)

Issue	Alternative 1 No Action	Alternative 2 Proposed Action	Alternative 3	Alternative 4	Alternative 5	Alternative 6
<b>Firearm Use</b>	McGinnis Mtn. open; Moraine Lakes Unit open - shotguns allowed during waterfowl, snowshoe hare, ptarmigan, and grouse seasons.	All units closed.	McGinnis Mtn. open; Dredge Lakes Unit open; shotguns allowed during waterfowl, snowshoe hare, ptarmigan, and grouse seasons.	McGinnis Mtn. Unit open during ptarmigan and grouse season for shotguns and rim-fire .22 caliber rifles.	All units closed.	McGinnis Mtn. open during ptarmigan and grouse season for shotgun and rim-fire .22 caliber rifles; Dredge Lakes Unit open during waterfowl, snowshoe hare, ptarmigan, and grouse seasons for shotguns only.
<b>Commercial Use</b>	Identify uses not compatible with area values; no commercial concession facilities allowed; no commercial allocation use levels established; outfitter/guide tours allowed on a case-by-case basis.	Criteria established for SUPs; no commercial concession facilities; commercial allocation levels established at 65% of capacity at Visitor Center, and on Mendenhall Lake and River; other outfitter/guide requests for commercial use on trails allowed only on case-by-case basis as determined by NEPA analysis.	Criteria established for SUPs; commercial concession facilities allowed on a case-by-case basis; commercial allocation levels established at 75% of capacity for the Visitor Center, and for Mendenhall Lake and River; outfitter/guide hiking tours allowed on East Glacier, West Glacier and Moraine Ecology trails at 20% of capacity.	Criteria established for SUPs; no commercial concession facilities; commercial allocation levels established at 50% of capacity for Visitor Center, and on Mendenhall Lake and River; outfitter/guide hiking tours allowed on East Glacier and Nugget Creek trails at 20% of capacity.	Criteria established for SUPs; commercial allocation levels established at 1995 levels for Visitor Center and on Mendenhall Lake and River; outfitter/guide hiking tours limited to 1995 levels.	Criteria established for SUPs; no commercial concession facilities; commercial allocation levels established at 65% of capacity for Visitor Center, and Mendenhall Lake and River; outfitter/guide hiking tours allowed on East Glacier, West Glacier and Nugget Creek trails with commercial allocation at 20% of ROS capacity; hiking tours on West Glacier Trail weekdays only.

Table 2-1. Comparison of Alternative by Component (continued)

Issue	Alternative 1 No Action	Alternative 2 Proposed Action	Alternative 3	Alternative 4	Alternative 5	Alternative 6
<b>Access</b>	West Glacier Trailhead, Back Loop Bridge Trailhead, Dredge Lake Road Trailhead, and parking lots near Visitor Center; Recreation Area closed from midnight to 6 a.m. except for Mendenhall Lake Campground.	Same as Alt. 1 plus; consider emergency access to Mendenhall River by Back Loop Bridge; upgrade Back Loop Bridge Trailhead; consider construction new trailheads near Administrative site and Glacier Spur Road; Recreation Area closed from midnight to 6 a.m. except for Mendenhall Lake Campground.	Same as Alt. 2 except that Administrative Site and Glacier Spur Road trailheads would also allow ORV access; ORV access eliminated at Back Loop Bridge Trailhead and at Dredge Lake Road Trailhead; consider 5 CBJ easements; boat users allowed access through gate at Mendenhall Lake; Recreation Area closed from midnight to 6 a.m. except for Mendenhall Lake Campground and McGinnis Mountain which allows overnight camping.	Same as Alt. 2 except that Administrative site and Glacier Spur Road trailheads would also allow ORV access; ORV access eliminated at Back Loop Bridge Trailhead and at Dredge Lake Road Trailhead.	Same as Alternative 1 except close Dredge Lake Road Trailhead to all access.	Same as Alt. 3 except no ORV access at Administrative Site and Glacier Spur Road trailheads.



Table 2-1. Comparison of Alternative by Component (continued)

Issue	Alternative 1 No Action	Alternative 2 Proposed Action	Alternative 3	Alternative 4	Alternative 5	Alternative 6
Fish & Wildlife	Emphasize viewing; support ADF&G closures; protect tern nesting areas.	Emphasis on ethical fish and wildlife viewing; support ADF&G closures; if impacts are detected, additional protective measures may be implemented, sport fish enhancement.	Same as Alternative 2.	Same as Alternative 2 plus; close west side of Mendenhall Lake to protect arctic terns; close rock peninsula near west face of Mendenhall Glacier to protect nesting gulls (5/15 - 7/15).	Same as Alternative 2 plus; close west shoreline of Mendenhall lake to protect arctic terns; close rock area near west face of Mendenhall Glacier to protect nesting gulls (5/15 - 7/15); close south shoreline of Mendenhall Lake to protect shorebirds and waterfowl.	Same as Alt. 2 plus through signing and on-site interpreters provide education visitors on potential impacts to shore nesting bird species from repeated disturbance; use special use stipulations to restrict commercial users from operating in area; will impact the gull colony on the west side of Mendenhall Lake; dogs must be on-leash from 4/15 thru 7/15 while on south and west shore of Mendenhall Lake.

## **F. Comparison of Impacts**

### **Issue 1 - Motorized Recreational Vehicle Use**

#### **Alternative 1 - No Action**

- ORV use allowed on 207 acres and 7.8 miles of trail.
- Current level of ORV recreation opportunities would be maintained.
- Non-motorized users would continue to be impacted by ORV noise and presence.
- Model airplane use allowed, same level of opportunities as existing condition.
- Motorized boat use allowed causing conflicts between motorized and non-motorized users on Mendenhall Lake and Mendenhall River.
- No developed public boat launch may limit motorized access.

#### **Alternative 2 - Proposed Action**

- ORV and snowmobile use would be prohibited except on Mendenhall Lake when frozen.
- There would be a reduction of opportunities for ORV use in Juneau by 207 acres and 7.8 miles.
- New pioneer trails would not be developed and old ones would revegetate.
- Non-motorized users in summer would not be impacted by ORV noise and presence.
- No winter ORV and snowmobile use in Mendenhall Lake Campground, reducing opportunities.
- No conflicts between motorized and non-motorized users in Mendenhall Lake Campground in winter.
- Model airplane use allowed, same level of opportunities as existing condition.
- Motorized boat use allowed causing conflicts between motorized and non-motorized users on Mendenhall Lake and River.
- No developed public boat launch may limit motorized access.

#### **Alternative 3**

- ORV use allowed on 3.13 miles of designated ORV trail.
- Provide 17.5 acre ORV area between Moose and Crystal Lakes, 189.5 acres less than existing condition.
- Provides diverse trail system.
- Provides for separation of motorized and non-motorized users.
- Provides for separation of motorized users from adjacent neighborhoods.
- Fewer pioneered trails.
- Requires ORV and snowmobile permit and safety course.
- Non-motorized users would continue to be impacted by ORV noise and presence.
- No winter ORV and snowmobile use in Mendenhall Lake Campground, reducing opportunities.
- No conflicts between motorized and non-motorized users in Mendenhall Lake Campground in winter.
- Model airplane use allowed, same level of opportunities as existing condition.
- Motorized boat use allowed causing conflicts between motorized and non-motorized users on Mendenhall Lake and River.

- No developed public boat launch may limit motorized access.

#### **Alternative 4**

- ORV use allowed on 7.8 miles of trail.
- Provide 144 acre ORV use area, 63 acres less than existing condition, reducing opportunities.
- Provides for separation of motorized and non-motorized users, decreasing trail encounters.
- Provides for separation of motorized users from adjacent neighborhoods, reducing conflicts.
- Fewer pioneered trails.
- Requires ORV and snowmobile permit and safety course.
- Non-motorized users would continue to be impacted by ORV noise and presence.
- No winter ORV use in Mendenhall Lake Campground, reducing opportunities.
- No conflicts between motorized and non-motorized users in Mendenhall Lake Campground in winter.
- Model airplane use allowed, same level of opportunities as existing condition.
- Motorized boat use prohibited, reducing opportunities.
- No conflicts between motorized and non-motorized boat users on Mendenhall Lake and Mendenhall River.

#### **Alternative 5**

- Prohibits all motorized recreation, reducing opportunities.
- Effects similar to but greater than Alternative 2 - Proposed Action.
- Provides for greater sense of solitude for non-motorized users.
- No conflicts between motorized and non-motorized users.
- New pioneer trails would not be developed and old ones would revegetate.
- Model airplane use prohibited, reducing opportunities.
- Motorized boat use prohibited, reducing opportunities.
- No conflicts between motorized and non-motorized users on Mendenhall Lake and River.

#### **Alternative 6**

- ORV and snowmobile use prohibited, except for on Mendenhall Lake when frozen.
- There would be a reduction of opportunities for ORV use in Juneau by 207 acres and 7.8 miles.
- New pioneer trails would not be developed and old ones would revegetate.
- Non-motorized users in summer would not be impacted by ORV noise and presence.
- No winter ORV and snowmobile use in Mendenhall Lake Campground, reducing opportunities.
- No conflicts between motorized and non-motorized users in Mendenhall Lake Campground in winter.
- Model airplane use allowed, same level of opportunities as existing condition.
- Motorized boat use prohibited, reducing opportunities.
- No conflicts between motorized and non-motorized users on Mendenhall Lake and River.

## Issue 2 - Firearm Use

### Alternative 1 - No Action

- Shotguns allowed in dispersed areas (McGinnis Mountain) and in Moraine Lake Unit during waterfowl and rabbit seasons.
- With City and Borough of Juneau and State regulations, 58 acres are available for duck and rabbit hunting with shotguns and archery.
- 740 acres on McGinnis Mountain open to shotguns.
- Some public would be concerned with recreating in an area where firearms are being discharged.

### Alternative 2 - Proposed Action

- Use of firearms (shotguns, rim-fire and center fire rifles, pistols, BB guns, pellet guns, pellet paint guns) would be prohibited in all units.
- Loss of 740 acres for grouse and ptarmigan hunting with shotguns, loss of 58 acres for hunting waterfowl and rabbits with shotguns.
- Reduced hunting opportunities.
- Reduction of safety concerns with firearms discharge.

### Alternative 3

- Shotguns allowed in Dredge Lakes Unit during waterfowl and rabbit seasons.
- Within City and Borough of Juneau and State regulations, 58 acres are available for duck and rabbit hunting.
- 740 acres on McGinnis Mountain open to shotguns and rim-fire .22 caliber rifles.
- Increased level of hunting opportunities on McGinnis Mountain.
- Public concerns same as Alternative 1 - No Action.

### Alternative 4

- 740 acres on McGinnis Mountain open to shotguns and rim-fire .22 caliber rifles.
- All other units closed to firearms.
- Loss of 58 acres of rabbit and waterfowl hunting opportunities.
- Reduction in hunting opportunities.
- There would be no safety concerns regarding rabbit and waterfowl hunting in Dredge Lakes Unit.

### Alternative 5

- Firearms prohibited in all units, same effects as Alternative 2.

### Alternative 6

- Same effects as Alternative 3.
- Greatest level of hunting opportunities of all alternatives, except for Alternative 3.
- Public concern would be similar to Alternative 3.

## Issue 3 - Commercial Use

### Alternative 1 - No Action

- No commercial allocation limits for commercial use of area, resulting in large increases of commercial use.

- Facility design capacities exceeded, resulting in public health and safety concerns.
- Increased visitors result in overcrowding in parking areas, view shelters, Visitor Center, and on trails near Visitor Center.
- Increased traffic, parking congestion, at Visitor Center parking lots.
- Highest level of commercial opportunities of all alternatives.
- Decreased enjoyment of area by visitors.
- Less solitude on trails.
- Least solitude for visitors of all alternatives.
- Trails, shelters, Visitor Center, parking areas would require more maintenance.
- Commercial concession facilities prohibited, reducing opportunities.

#### **Alternative 2 - Proposed Action**

- Criteria for commercial and special event Special Use Permits established, providing greater consistency and limiting impacts to other activities; criteria would also result in reduced opportunities for some commercial and special event special uses.
- Commercial use allocation levels for commercial use established at 65% of capacity for Visitor Center, providing opportunities for growth for next 4-12 years, until allocation levels reached. When new Visitor Center completed, opportunities for commercial growth for next 16-20+ years.
- Commercial use allocation levels for commercial use established at 65% of capacity for Mendenhall Lake and Mendenhall River, providing opportunities for commercial growth for next 7-16 years for Mendenhall River, and for next 5-10 years for Mendenhall Lake, until allocation levels reached.
- Once commercial allocation levels reached, some visitors will not be able to visit Recreation Area on guided tour.
- No commercial allocation levels for commercial use on trails, providing new opportunities for some operators.
- Commercial use allocation levels for commercial use at Visitor Center established at 246,570 visitors per summer; increased to 462,190 visitors per summer when the Visitor Center expansion project is completed. Allowed commercial uses would be bus, mini-van, car, taxi, limousine, and bike tours, package trips, charters, and point-to-point transportation.
- Commercial use allocation levels for commercial use on Mendenhall Lake established at 2,980 visitors per summer and on Mendenhall River at 38,190 visitors per summer.
- Increase of commercial use by 82,251 visitors over existing levels of commercial use at Visitor Center and on Mendenhall Lake and River.
- Moderate to high economic growth potential for commercial operators.
- Decreased enjoyment for some visitors due to crowding at Visitor Center.
- Less solitude on Mendenhall River and Mendenhall Lake than the existing condition.
- Same effect on visitor experience on trails as Alternative 1 - No Action.
- Effects to infrastructure less than Alternative 1 - No Action.
- Commercial concession facilities, effects same as Alternative 1 - No Action.

#### **Alternative 3**

- Commercial and special event Special Use Permits effects, same as Alternative 2 - Proposed Action.
- Commercial use allocation levels for commercial use established at 75% of capacity for Visitor Center, providing opportunities for growth for next 8-18 years, until allocation levels reached. When new Visitor Center completed, opportunities for commercial growth for next 20-20+ years.
- Commercial use allocation levels for commercial use established at 75% of capacity for Mendenhall Lake and Mendenhall River, providing opportunities for commercial growth for next 9-20 years for Mendenhall River, and for next 5-10 years for Mendenhall Lake, until allocation levels reached.

- Commercial use allocation levels for designated trails established at 20% of capacity, providing opportunities for commercial growth for next 20-20+ years, until allocation levels reached.
- Commercial use allocation levels at Visitor Center established at 284,500 visitors per summer. Commercial allocation levels increased to 533,300 visitors per summer when the Visitor Center expansion project is completed.
- Commercial allocation levels established for outfitter/guide hiking on East Glacier, West Glacier, and Moraine Ecology trails, providing new business opportunities.
- Less solitude on East Glacier, West Glacier, and Moraine Ecology trails than existing condition.
- Less solitude on trails than current levels but more than Alternative 2 - Proposed Action; increased visitor numbers on trails on both sides of lake.
- No outfitter/guide hiking on other trails, reducing business opportunities.
- Commercial allocation levels for commercial use on Mendenhall Lake established at 3,720 visitors per summer and on Mendenhall River at 43,030 visitors per summer.
- Less solitude on Mendenhall Lake and River but more than Alternative 1 - No Action which has no commercial use allocations.
- Increase of commercial use by 139,900 visitors over existing levels of commercial use.
- Increased visitors result in crowding in parking area, view shelters, Visitor Center, and West Glacier Trailhead, but less than Alternative 1 - No Action,
- Decreased enjoyment of area by visitors.
- Trails, shelters, Visitor Center, parking areas would require more maintenance than Alternatives all other alternatives, except Alternative 1.
- Commercial concessions allowed if they meet established criteria, providing new opportunities.
- Increased satisfaction for some visitors because of additional concession amenities, others will experience decreased satisfaction because of change of area's natural character.
- Increased litter, congestion in parking lots from concessions.

### Alternative 4

- Commercial use allocation levels for commercial use established at 50% of capacity for Visitor Center, providing opportunities for growth for next 1-48 years, until allocation levels reached. When new Visitor Center completed, opportunities for commercial growth for next 12-20+ years.
- Commercial use allocation levels for commercial use established at 50% of capacity for Mendenhall Lake and Mendenhall River, providing opportunities for commercial growth for next 4-8 years for Mendenhall River, and for next 5-10 years for Mendenhall Lake, until allocation levels reached.
- Commercial use allocation levels for designated trails established at 20% of capacity, providing opportunities for commercial growth for next 10-20 years, until allocation levels reached.
- Commercial use allocation levels for commercial use at Visitor Center could be established at 189,670 visitors per summer and could be increased to 355,530 visitors per summer when the Visitor Center expansion project is completed.
- Some visitors would not be able to visit or travel to the Visitor Center by commercial tours.
- Demand for commercial services would exceed authorizations; prospectus would be issued.
- Outfitter/guide hiking on East Glacier and Nugget Creek trails with 48 persons per day in four groups, for a total of 5,950 visitors per summer on East Glacier Trail, and 2,980 visitors per summer on Nugget Creek Trail.
- Outfitter/guide hiking allowed for 96 people per day on 7.5 miles of trail.
- Less solitude on trails than current levels but more than Alternatives 1, 2 and 3; increased visitor numbers on trails concentrated on east side of lake near Visitor Center.

- Commercial use allocation levels for commercial use on Mendenhall Lake established at 1,860 visitors per summer and on Mendenhall River at 31,000 visitors per summer.
- Levels of solitude on Mendenhall River similar to the existing condition, but less than Alternative 5; less solitude on Mendenhall Lake than existing condition.
- Increase of commercial use by 24,152 visitors over existing levels of commercial use.
- Increased visitors result in crowding in parking area, view shelters, Visitor Center, but less than Alternatives 1, 2 and 3. Visitation by commercial tours would be similar to 1995 levels.
- Decreased enjoyment of area by visitors.
- Trails, shelters, Visitor Center, parking areas, would require more maintenance but not as much as Alternatives 1, 2 and 3.
- Commercial concession effects same as Alternative 1 - No Action.

#### **Alternative 5**

- All commercial use would be limited to the 1995 levels, limiting potential revenues.
- Commercial use allocation levels at Visitor Center could be established at the 1995 level or 179,748 visitors per summer. No increase in commercial use levels when the Visitor Center expansion project is completed. Commercial use authorized for existing uses only; no new tours, limiting opportunities.
- Commercial use allocation levels on Mendenhall Lake established at 160 service days per summer and on Mendenhall River established at 25,892 service days per summer, with no additional increases.
- Some visitors would not be able to visit or travel within the area by commercial tours.
- Demand for commercial services would exceed authorizations; prospectus would be issued.
- Commercial operators would experience the least room for economic growth.
- Visitors would experience the greatest solitude of the alternatives.
- Trails, shelters, Visitor Center, parking areas, would need less maintenance than any of the other alternatives.
- Commercial facilities concessions, effects same as Alternative 1 - No Action.

#### **Alternative 6**

- Commercial and special event Special Use Permits effects, same as Alternative 2 - Proposed Action.
- Effects of commercial use allocation levels at Visitor Center same as Alternative 2 - Proposed Action.
- Commercial use allocation levels for commercial use established at 65% of capacity for Visitor Center, providing opportunities for growth for next 4-12 years, until allocation levels reached. When new Visitor Center completed, opportunities for commercial growth for next 16-20+ years.
- Commercial use allocation levels for commercial use established at 65% of capacity for Mendenhall Lake and Mendenhall River, providing opportunities for commercial growth for next 7-16 years for Mendenhall River, and for next 5-10 years for Mendenhall Lake, until allocation levels reached.
- Commercial use allocation levels for designated trails established at 20% of capacity, providing opportunities for commercial growth for next 17-20+ years, until allocation levels reached.
- Some visitors would not be able to visit or travel to the Visitor Center by commercial tours.
- Increased visitors result in crowding in parking area, view shelters, Visitor Center, but less than Alternatives 1 and 3. Visitation by commercial tours would be 30% higher than 1995 levels.
- Outfitter/guide hiking allowed for 120 people per day on 7.5 miles of trail, Monday through Friday, and for 72 people per day on 4.5 miles for trail on weekends.

- Effects of commercial use allocation levels established for outfitter/guide hiking on East Glacier and Nugget Creek same as Alternative 4.
- Effects of commercial use allocation levels for outfitter/guide use on West Glacier Trail similar to Alternative 3 except less business opportunity due to guided hiking limited to weekdays only.
- Less solitude on trails than current levels but more than Alternative 1, 2, and 3.
- Reduced conflicts and increased enjoyment for non-commercial users on West Glacier Trail.
- No commercial use of rock outcrop near glacier, reducing commercial opportunities.
- Increased sense of solitude and enjoyment for non-commercial users using rock outcrop near glacier.
- Outfitter/guide commercial use allocation levels for commercial use on Mendenhall Lake and Mendenhall River same as Alternative 2 - Proposed Action.
- Same levels of solitude on Mendenhall Lake and Mendenhall River as Alternative 2 - Proposed Action.
- Demand for commercial services would exceed authorizations; prospectus would be issued.
- Same level of maintenance as Alternative 2 - Proposed Action.
- Commercial concession facilities effects, same as Alternative 1 - No Action.

#### **Issue 4 - Access**

##### **Alternative 1 - No Action**

- New construction and conversion of parking lots at Visitor Center would provide for additional parking, but area would continue to be crowded.
- West Glacier Trailhead and Skater's Cabin would continue to be crowded with fifteen spaces available at West Glacier, Skater's Cabin upgraded to fourteen spaces.
- Back Loop Bridge Trailhead would continue to be crowded with only seven spaces.
- Dredge Lake Road Trailhead would continue with parking for four cars, leading to crowding, noise, and garbage problems. Visitors would continue to drive through residential area to reach trailhead.
- Gladstone Avenue and Administrative Site would continue with one to two parking spaces.
- No new access points into Recreation Area would provide same level of access as existing condition.

##### **Alternative 2 - Proposed Action**

- New construction and conversion of parking lots at Visitor Center would provide for additional parking, but area would continue to be crowded.
- West Glacier Trailhead and Skater's Cabin, same as Alternative 1 - No Action.
- Gladstone Avenue Access would continue with two to three spaces, same as Alternative 1 - No Action.
- Back Loop Bridge Trailhead could be reconstructed to accommodate twelve vehicles resulting in less crowding. Construction of emergency vehicle access could allow easier, more time efficient access for river rescue crews.
- Dredge Lake Road Trailhead impact would be similar to Alternative 1 - No Action, but there would be less crowding due to possible construction of two new trailheads.
- Possible construction of seven to twelve new parking spaces at Glacier Spur Road could lead to less congestion at other parking areas.
- Possible construction of five to seven new parking spaces at the Administrative site could lead to less congestion at other trailheads.



- Due to ORV prohibition, there would be less congestion at trailheads in summer.
- All access points closed midnight to 6:00 a.m., resulting in less vandalism.

### **Alternative 3**

- Vehicle access would be allowed for boat and wind surfing launch at the West Glacier Trailhead, increasing recreation opportunities on Mendenhall Lake and Mendenhall River.
- Back Loop Bridge Trailhead would be unavailable for ORV access, reducing access for some ORV users.
- Two new trailheads for ORV's access could be developed, redirecting ORV traffic away from residential neighborhoods and reducing conflicts with residential neighborhoods.
- Easements for City and Borough of Juneau could be considered to develop five maintenance and emergency vehicle turnarounds, providing increased access to Recreation Area, but also potential for increased vandalism and illegal use.
- Other effects the same as Alternative 2 - Proposed Action.

### **Alternative 4**

- Effects same as Alternative 2 - Proposed Action except for two new trailheads for ORV access, effects same as Alternative 3.

### **Alternative 5**

- Effects the same as Alternative 2 - Proposed Action with the exception that Dredge Lake Road Trailhead would be closed, resulting in less impacts to the residential area, but also less access for all users to the Recreation Area.
- More parking could be available than Alternative 1 - No Action due to possible reconstruction of two existing trailheads.

### **Alternative 6**

- Effects same as Alternative 3, except that the trailheads at the Administrative Site and on Glacier Spur Road would not allow ORV access.

## **Issue 5 - Fish and Wildlife**

### **Alternative 1 - No Action**

- Reduced fish productivity due to 200 square yards (0.04 acres), or 14% of available spawning habitat in the Dredge Lakes Unit impacted by ORV's crossing streams.
- Protection of tern and shorebird habitat due to seasonal restriction on visitor use of Tern Island.
- Songbird habitat would continue to be impacted by pioneer trails.

### **Alternative 2 - Proposed Action**

- Area closed to firearm and ORV use.
- Impacts to spawning habitat would be reduced.
- Prohibiting ORV's would allow trails to become revegetated, which would provide new habitat, benefiting songbirds.
- If impacts are identified, new protective measures could be implemented. This could lead to greater reproductive success for terns, gulls, and shorebirds.

**Alternative 3**

- Less impact to fish habitat as designated ORV trails deter ORV crossings of streams in spawning areas.
- Impacts to shorebirds, arctic terns, and gulls would be the same as Alternative 2 - Proposed Action.
- Less impact to songbird habitat than Alternative 2 - Proposed Action due to fewer pioneer trails.

**Alternative 4**

- Impacts to spawning habitat would be the same as Alternative 2 - Proposed Action because ORV area would be away from spawning streams.
- West shore of Mendenhall Lake would be closed to foot traffic from May 15 through July 15, protecting the gull colony, fifty acres of shorebird nesting area, and 100 acres of tern nesting area, which could lead to greater reproductive success of these species.
- Less impact to songbird habitat than Alternative 2 - Proposed Action due to fewer trails.

**Alternative 5**

- Impacts to spawning habitat would be the same as Alternative 2 - Proposed Action.
- The impacts to shorebirds, arctic terns, and gulls would be the same as Alternative 4 with the additional protection of fifty acres of habitat for shorebird and arctic tern nesting habitat along the south shore of Mendenhall Lake, which could lead to greater reproductive success.
- Less impact to songbird habitat than Alternative 2 - Proposed Action due to fewer trails.

**Alternative 6**

- Area closed to ORV use.
- Impacts to spawning habitat would be reduced.
- Prohibiting ORV's would allow trails to become revegetated, which could provide more habitat, benefiting songbirds.
- Monitoring and seasonal protection measures could reduce impacts to shorebirds, arctic terns, and gulls, leading to greater reproductive success.
- Dogs on-leash along the south and west shores of Mendenhall Lake from April 15 through July 15 could protect nesting shorebirds and waterfowl leading to increased survival of young.
- Greater information and education to the public about Mendenhall Lake to protect shorebirds and waterfowl could result in reduced impacts to nests, leading to greater reproductive success.
- Special Use Permits would have stipulations to protect nesting gulls from April 15 through July 15 on the rock outcrop near the west face of Mendenhall Glacier.

## **G. Mitigation and Monitoring**

The Juneau Ranger District would monitor the Recreation Area and review law enforcement incident reports to determine if ORV use is occurring outside the designated area or if safety problems have been reported. Corrective measures would then be developed to help alleviate this problem.

Monitoring in conjunction with law enforcement patrols will occur as funding and priorities allow. These patrols will target illegal ORV and snowmobile use, littering, area closures, vandalism, drug and alcohol use, and illegal firearm use.

Education is a valuable tool in mitigating human impacts to fish and wildlife species. News releases, signing, working with local tour operators, and working with school groups can help reduce disturbance to the terns and shorebirds as well as spawning salmon. Education can also be used to mitigate conflicts among user groups. Education outreach programs targeting ORV users, mountain bike users, hikers, and other users of the Recreation Area stressing "Tread Lightly" and low impact "Watchable Wildlife Viewing" techniques would occur as budget and staffing allow. User group conflicts and impacts to vegetation, fish, and wildlife resources from recreational users would be mitigated.

Spring songbird monitoring is conducted at various locations throughout the area in accordance with national protocol. Salmon and trout spring migrations are monitored in several locations within the Recreation Area. Adult salmon escapements are monitored in Steep Creek and the Dredge Lakes system. Observations of shorebird and tern nesting, as well as the gull colony on the rock peninsula, are made by district biologists as well as Visitor Center staff. This data will be summarized at the end of each season.

There are several potential fisheries projects that will result in mitigation to some of the impacts that are currently occurring in the Recreation Area. These include construction of stream crossing structures, spawning habitat improvements, the proposed Steep Creek Salmon Viewing Trail, and creating additional pond habitat by deepening Crystal Lake. Direct loss of eggs and fry from traffic on spawning habitat, habitat degradation from riparian vegetation loss and bank erosion caused by foot and vehicle traffic, and harassment of spawning fish are the impacts that these projects could mitigate.

Any special use permits authorized will continue to be monitored as described in Forest Service Handbook 2709. This monitoring will consist of routine inspections for permit compliance and compliance with state, federal, and city regulations.

Existing capacity and commercial use allocations will be monitored and evaluated through the administration of special use permits to determine if use allocations are causing unacceptable impacts to the visitor experience or to natural resources. Visitor surveys would be conducted as budget and staffing allows focusing on the use and visitor recreation experience at the Visitor Center, on trails, and on Mendenhall Lake and Mendenhall River. Mitigation measures would include re-evaluation of allocation levels (increases or decreases), depending on impacts and/or benefits that are occurring.

## **H. Enhancement Opportunities**

New enhancement opportunities for the Recreation Area are listed in the 1996 Mendenhall Glacier Recreation Area Management Plan, Appendix 1. Some are projects that have been proposed by the public and the agency; some are further along in the planning stages. Some of these projects could require an environmental analysis in accordance with NEPA, depending on the final proposal (i.e., brushing a trail does not require NEPA documentation or analysis, but construction does).

# **Chapter 3**

## **Affected Environment**

### **A. Introduction**

This chapter describes the existing environmental resources within the Mendenhall Glacier Recreation Area. The information in this chapter comes from a range of sources. These sources include Forest Service studies and surveys, data from other resource agencies, and personal knowledge from individuals, both within and outside the Forest Service. Much of this information is summarized from data provided by Forest Service employees. These resource reports are contained in the Planning Record at the Juneau Ranger District Office.

The Recreation Area encompasses 5,815 acres at the head of the Mendenhall Valley. This area contains a wide variety of physical environments including glacial ice, steep valley walls, bare rock cliffs, flat glacial outwash, lakes and ponds, a large glacial river, and many small, clear streams. The vegetation ranges from primary successional forbs and lichens to mature spruce/hemlock forests. This variety of habitats attracts diverse fish and wildlife populations. The Recreation Area's proximity to one of Juneau's major residential areas and its easy access by visitors also makes it a popular destination for people pursuing many recreational activities such as hiking, photography, bicycling, ORV use, sightseeing, camping, picnicking, boating, hunting, and wildlife viewing.

This chapter includes information on the physical, biological, and human/social environments within the Recreation Area. The resources covered in this chapter are those that may be affected by the alternatives presented in this document.

### **B. Soils and Wetlands**

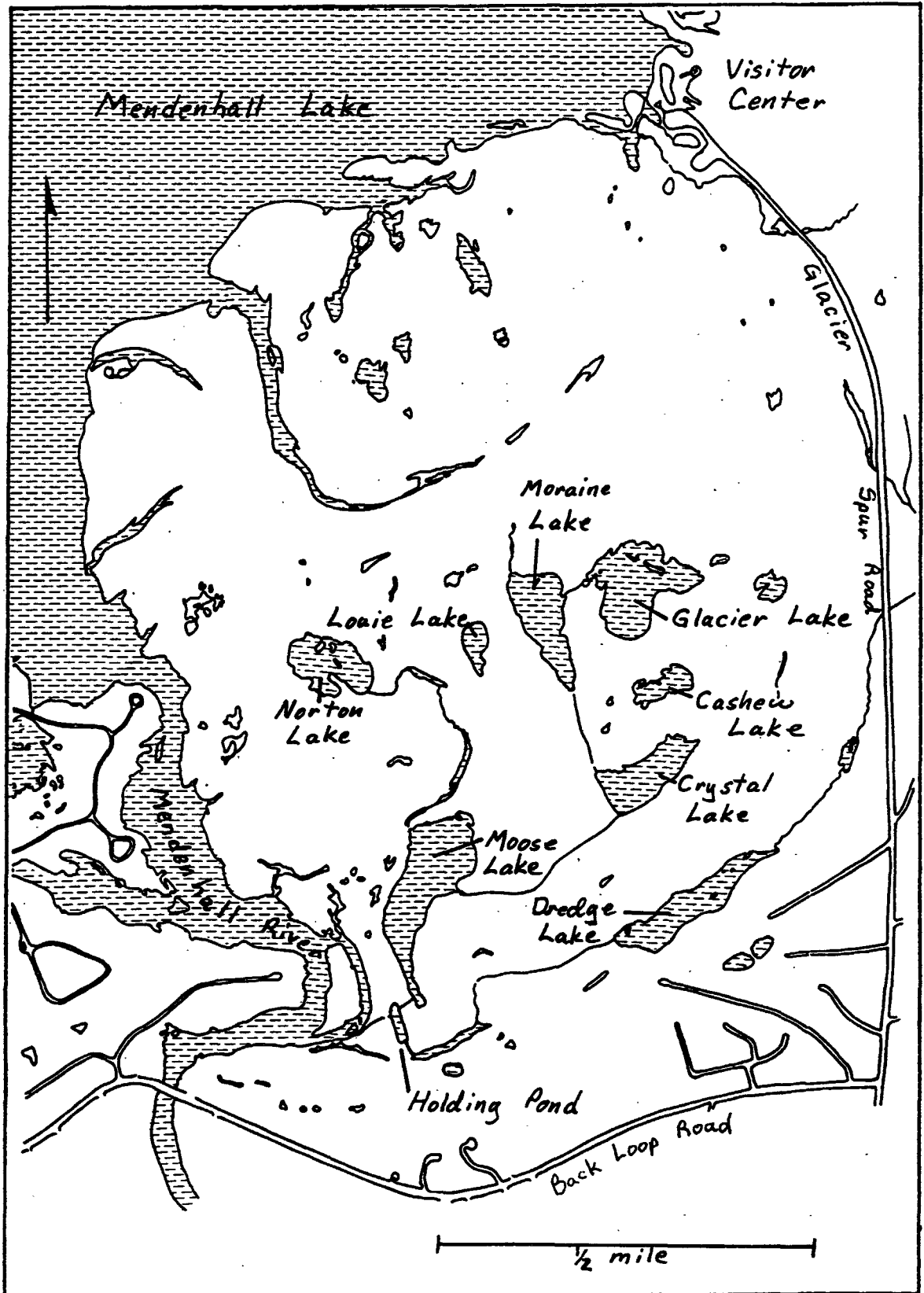
Most of the soils of the area are a direct result of the recent glaciation. The steep mountain sides on the east and west sides of the Recreation Area were scraped clean by glacial advances. The valley bottom consists of deep deposits of glacial materials. Generally the soils on the mountain sides are shallow mineral soils. They are well drained with high permeability. The upper slopes of the mountains tend to have a higher percentage of organics.

The valley bottom, including both sides of the lake, contain mostly recently deposited glacial materials. They are mainly sands with sporadic gravels and cobbles. These deep soils range from poor to very well drained with rapid permeability.

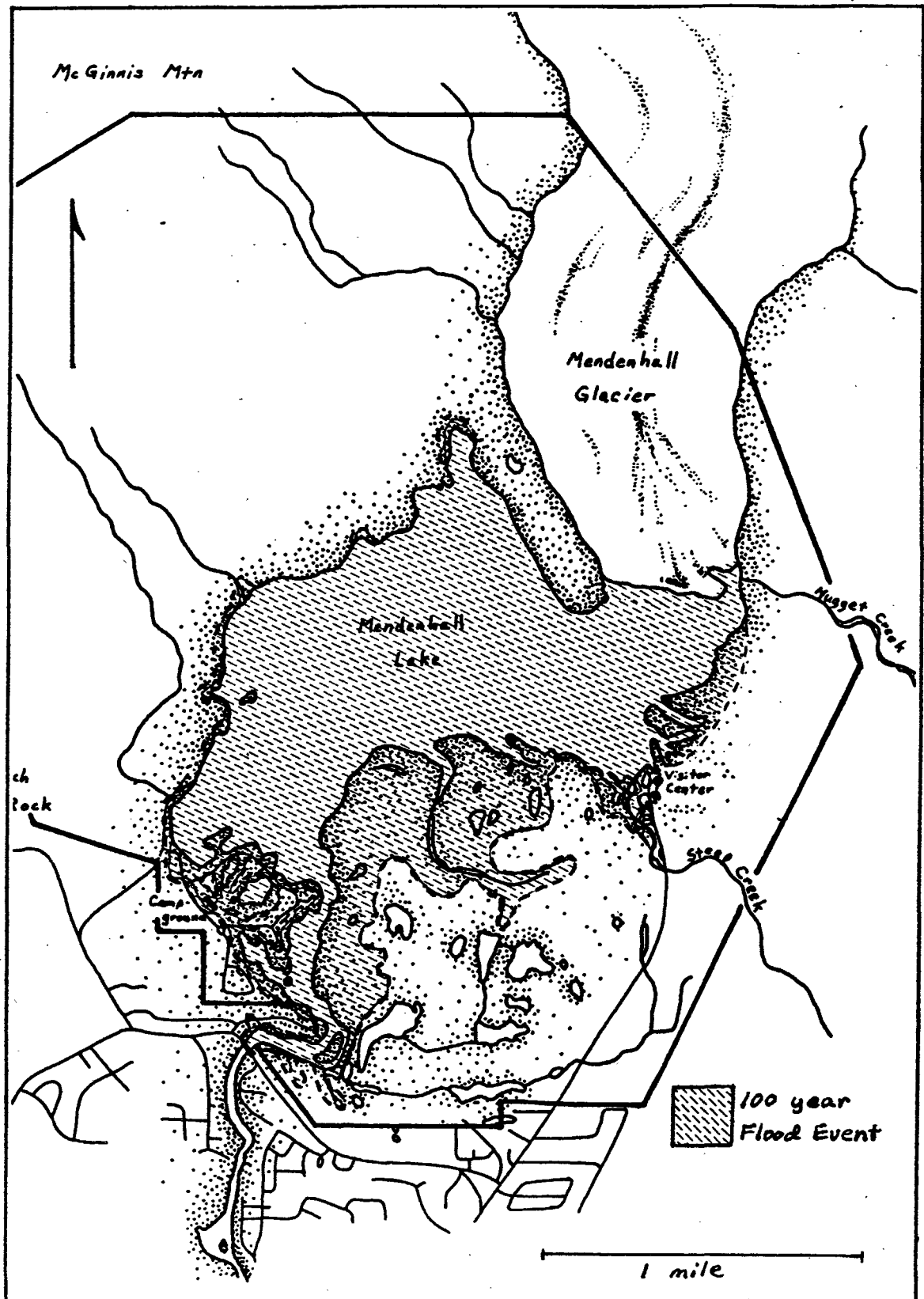
The southern boundary of the Recreation Area is near the furthest extent of the most recent glaciation. The terminal moraine is located just south of the Back Loop Road. For this reason, the soils near the southern boundary of the Recreation Area are more organic in nature. They are poorly drained with moderate to rapid permeability. They mostly contain sandy loam materials.

For the most part, wetlands in the Recreation Area are limited to the surface water and areas directly adjacent to surface water (City and Borough of Juneau, 1987) which includes all ponds and lakes

**Map 11. Ponds and lakes in the glacial outwash area south of Mendenhall Lake.**



Map 12. 100 year flood events in the Recreation Area.



in the Recreation Area (see Map 11). This is probably because most of the soils in the area are well drained.

Because the water level in Mendenhall Lake fluctuates, there are beach areas, particularly on the east side of the lake, that are covered during high water periods and dry during low water. These areas are also classified as wetlands. A 100 year flood event was calculated as part of the Mendenhall Campground Upgrade design by Phaken Consulting Engineers and Associates, Inc. in 1994. They determined that the lake level would be at 62.5 feet and that the water level at the southern end of the campground would be at 61.2 feet. This information was confined with known elevations throughout the Dredge Lakes area and the Visitor Center to develop a map of a 100 year flood event (see Map 12).

Within the Dredge-Crystal Lakes Unit there is approximately 1.5 acres of wetland habitat that has been impacted by trails. A majority of these impacts are related to ORV use. In the Moraine Lakes Unit there is approximately 8.2 acres of wetland habitat that has been impacted by trails associated with ORV's.

## **C. Water**

Mendenhall Lake and River are primarily fed by glacial melt from the Mendenhall Glacier. The lake level can fluctuate as much as six feet annually. The lake and river are at their highest during summer warm spells and during large rain events, often in the fall. They are at their lowest during the late winter when precipitation is generally low and the glacier melt is at its lowest. Mendenhall Lake is up to 200 feet deep in places and covers about 2.3 square miles.

Several streams flow from the steep surrounding mountains into the lake, river, and the glacial outwash south of the lake. These streams are fed mostly by snowmelt and rain runoff. The largest of these streams is Nugget Creek which has a watershed drainage area of eight square miles. During the summer months, Nugget Creek is slightly silty due to ice melt from Nugget Glacier at its head waters. All but a small fraction of this watershed is outside the Recreation Area. Steep Creek is the second largest runoff stream in the Recreation Area with a watershed drainage area of 1.8 square miles. Like Nugget Creek, most of Steep Creek's watershed drainage is outside of the Recreation Area. A number of small streams enter the lake from the west. These streams drain the east side of McGinnis Mountain. There is a small stream which enters the system from the east and feeds Dredge Lake. This stream flows off the side of Heintzleman Ridge and then flows for about one mile across the flat outwash area before running into Dredge Lake.

The glacial outwash area to the south of Mendenhall Lake, known locally as the Dredge Lakes area, contains nine ponds which range in size from ten acres to three acres and have local names (Map 11). Some of these ponds are human-made and some are natural kettle ponds. They generally are all ground water fed with some being connected by small streams. Most of these small streams are intermittent, usually going dry during dry spells, often in July. In addition to these larger ponds, the area contains many smaller kettle ponds and sloughs. Some of these are connected to Mendenhall Lake during high water.

There are two ponds and associated wet areas in the Mendenhall Lake Campground. These ponds total about five acres and have periodic connections with Mendenhall Lake during high water events.

## **D. Vegetation**

There are a variety of habitats where different plant communities are found within the Recreation Area. These habitats include coniferous forest, mixed conifer/deciduous forest, forest edge, shrubby areas, rocky areas, rock outcrops, ridgetops, cliffs, gravel, scree, talus, boulder fields, seeps, wet areas,

riparian areas, streambanks, waterfalls, lake margins, ponds, shallow freshwater, marshes, swamps, sphagnum bogs, heath, areas dominated by moss or lichen, dry meadows, and moist-wet meadows. Because much of the Recreation Area is in primary and secondary stages of plant succession, the plant communities will continue to develop and change over time. Much of the area will develop toward a mixed coniferous forest habitat.

The steep valley walls on both the east and west sides of the Recreation Area are covered with mature spruce/hemlock forests. Near the head of the valley, the lower part of these side walls were scraped clean by the most recent glacial advances. These areas are now covered with a mixed coniferous/deciduous forest. The deciduous component is mostly red alder and black cottonwood. The flat outwash area south of Mendenhall Lake is a mixture of various aged primary and secondary successional stands. These range from open gravel areas with lichens, grasses, and forbs, to thick brushy areas dominated by alder and willow, to young closed canopy hemlock/spruce stands. The age of these coniferous stands increases with distance from the glacier. The amount of open area decreases with distance from the glacier. The flats and upper beach areas along Mendenhall Lake contain assemblages of forbs that are normally found only in alpine areas.

The south and east shore of Mendenhall Lake is particularly important as shorebird nesting habitat because the vegetation consists of low forbs and lichens. Currently, approximately 13.6 acres of the habitat is being impacted by ORV's.

There are no Threatened or Endangered plant species suspected to occur in Southeast Alaska. Plant surveys conducted in the Recreation Area failed to locate any of the twelve plant species on the Forest Service Region 10 Sensitive Species List that are known or expected to occur on the Juneau Ranger District. These surveys were conducted in areas that are likely to be impacted by ORV's, bicycles, and hiking within the Recreation Area.

Recent plant surveys identified two areas of special interest. One of these is the first 1.5 miles of the East Glacier Trail. Four Species of *Polysticum* ferns and several hybrids were found growing in this area. This rather large assemblage of species and hybrids is unique and presents a valuable opportunity for studying evolutionary relationships in ferns.

The second area of special interest is the sandy area to the southwest of the mouth of Steep Creek. The vegetation in this area is dominated with fruticose lichens. This type of plant community is rare and is easily disturbed by foot traffic.

### E. Fisheries

The Recreation Area supports a number of fish species including sockeye salmon, coho salmon, Dolly Varden char, and cutthroat trout. During some years, the area is also used by pink salmon, chum salmon, and king salmon. See Table 3-1 for a summary of fish use of the Recreation Area. There are no Threatened or Endangered, or Region 10 sensitive fish species in the Recreation Area.

Mendenhall Lake is used by juvenile and adult sockeye salmon, juvenile and adult coho salmon, juvenile and adult Dolly Varden char, and adult cutthroat trout. Sockeye salmon juveniles spend from one to three years in the lake before moving out to sea. It is suspected that some sockeye spawning takes place along the lake shore near the mouths of streams which enter the lake on its west side. The margins of the lake are used by rearing coho salmon and Dolly Varden char. These shoreline habitats are particularly important for coho and Dolly Varden rearing because of the shallow water and the small sloughs and nearby ponds. Coho salmon juveniles also spend from one to three years in fresh water before heading out to sea. Dolly Varden can be anadromous or fresh water resident. The anadromous Dolly Varden probably spend between three and five years in fresh water before heading to the ocean for their first time. Mendenhall Lake is also used by mature cutthroat trout and Dolly Varden char for over-wintering.



**Table 3-1: Summary of Fish Use in the Recreation Area**

Location	Coho Salmon	Sockeye Salmon	Dolly Varden	Cutthroat Trout
Mendenhall Lake	S/R	S/R	O	O
Mendenhall River	S			
Mendenhall Campground Ponds	R		R/O	R/O
Holding Pond	R	R	R	R/O
Moose Lake	S/R	R	R	R/O
Dredge Lake	S/R		S/R	S/R
Glacier Lake			R/O	R/O
Moraine Lake			R/O	R/O
Westside Streams	S/R	S	S/R	
Steep Creek & Kettle Ponds	S/R	S/R	S/R	S/R
Nugget Creek	S			

S = spawning habitat

R = rearing habitat

O = overwintering

The lower reaches of several small streams, which enter the west side of the lake, are accessible to anadromous fish. Some coho and sockeye spawning takes place in the lower reaches of these streams. The lower reaches of these streams are also used by rearing coho salmon and Dolly Varden char. These streams may also be used by spawning Dolly Varden.

Two ponds and associated wet areas in the Mendenhall Lake Campground are also accessible to anadromous fish during high flows. These areas are used by rearing coho, Dolly Varden, and cutthroat. The ponds are also used as over-wintering areas for mature Dolly Varden and cutthroat. The two ponds and associated wet areas have a total area of approximately five acres.

In the outwash area south of the glacier, three of the larger ponds, and some of the streams that flow into and out of them, are accessible to anadromous fish. These ponds are the Holding Pond, Moose Lake, and Dredge Lake. The stream that feeds Dredge Lake is also accessible to anadromous fish to the point where it flows off Thunder Mountain. These areas are used by spawning coho salmon, Dolly Varden, and cutthroat. The ponds are also important rearing areas for these species as well as a small number of sockeye salmon. This area produces from 5,000 to 10,000 coho smolts a year. Returning adult coho salmon are estimated between 300 and 2,000 annually.

Moraine and Glacier Lakes are natural kettle ponds. Combined, the two lakes provide approximately ten acres of quality habitat. These lakes provide quality habitat for several reasons which include the amount and quality of the ground water that feeds them; the depth, which is sufficient to over-winter large numbers of fish; the margins of Moraine Lake have extensive submerged woody debris and emergent vegetation; the amount of submerged woody debris in Glacier Lake has been increased through enhancement projects; and the spawning habitat has been improved through enhancement activities. Glacier Lake has no regular tributaries and flows into Moraine Lake. The small stream which connects the two lakes contains spawning habitat. Moraine Lake has two outlets. Fish migration barriers were installed on these outlets in the 1970's in order to create sport fishing opportunities which emphasize resident fish species. Currently, these lakes contain small populations of cutthroat trout and Dolly Varden char. These populations are expected to increase as the result of recent enhancement activities.

Steep Creek, and the small kettle ponds which are connected to it, support runs of sockeye and coho salmon as well as Dolly Varden char. They are also used by rearing coho salmon and Dolly Varden. Cutthroat trout may also spawn and rear in Steep Creek. The annual sockeye run ranges from 1,000 to 3,000 fish and the coho run ranges from 500 to 1,500 fish.

When Mendenhall Lake is low from fall through early summer, Nugget Creek contains approximately 600 feet of stream habitat below the falls. This habitat has recently developed as a result of the glacier's retreat. Coho salmon now use this section of stream for spawning.

The Recreation Area contains approximately 35 surface acres of clear water fish habitat. Of this, 0.3 acres are spawning habitat. The remainder is used by young fish as rearing habitat and by mature fish as over-wintering habitat.

## **F. Wildlife**

Because of the variety of plant communities and the abundance of deciduous habitat, the Recreation Area supports a diversity of terrestrial wildlife species. The area is dynamic and as the plant communities change, so will the wildlife species that occupy them.

There are no known Threatened or Endangered terrestrial wildlife species in the Recreation Area. The trumpeter swan and the Queen Charlotte goshawk are on the Region 10 Sensitive Species List. The Sensitive Species List is a list of plant and animal species, identified by the Regional Forester for Region 10, for which population viability is a concern. Both of these birds are found in the Recreation Area. A Biological Evaluation (BE) was completed for all Threatened, Endangered, and Sensitive Species that may occur in the area, and is part of the EIS planning record. Groups of animals most likely to be affected by alternatives presented in this document include: waterfowl, songbirds, shorebirds, arctic terns, gulls, and various mammals. A discussion of each of these groups follows.

### **Threaten and Endangered Species**

The American peregrine falcon is the only animal on the Federal Threatened or Endangered list may occur in the Recreation Area. These birds may occur in the project area as transients, primarily during seasonal migration. The Forest Service has no knowledge of sightings in the area. The area habitat is not designated as critical.

Three species of birds inhabit the area that are considered category two species. Category two species are species whose viability is questioned but enough data does not exist to determine their eligibility as threatened or endangered. These birds include the harlequin duck, northern goshawk, and the marbled murrelet.

Harlequin ducks nest in Steep Creek which is one of the streams that feed Mendenhall Lake. They also use Mendenhall Lake and Mendenhall River for brood rearing.

Northern goshawks occur in the project area. A known nesting area is located on the east side of the Recreation Area on a steep mountain slope. Goshawks are known to use the entire project area for foraging.

Marbled murrelets may occur in the project area. We know that they do use the drainages in the Recreation Area as flight corridors. They may nest within the Recreation Area on the steep slopes of the valley walls.

### **Waterfowl**

Waterfowl species that have been sighted in the Recreation Area include trumpeter swans, northern pintails, hooded, common, and red-breasted mergansers, northern shovelers, harlequin ducks, scaup, ring-necked ducks, mallards, goldeneyes, red-throated loons, and blue and green-winged teal.

Mendenhall Lake is often used in the summer by brood rearing mergansers and loons. The lake offers salmon fry and smolts as a food source for these birds. The lake also receives some use by other species, primarily diving ducks, during migration.

The ponds and wet areas scattered throughout the Recreation Area provide nesting and brood rearing habitat for red-throated loons, mallards, pintails, and mergansers. Mallards nest in the very small ponds and wet areas and move their broods to the larger ponds during the summer. A breeding waterfowl survey has never been completed for the entire Recreation Area. The red-throated loons appear to only nest on the larger ponds that receive little recreational use. The number of nesting loons appears to be declining in recent years (Gordon, 1994). This decline could be attributed to an increase in recreational use at several of the ponds. Successional vegetation changes could also be affecting nesting loon numbers. The larger ponds in this area are used by migrating waterfowl including puddle ducks, diving ducks, and trumpeter swans. Although migrating waterfowl use the Recreation Area, high densities are not common. During migration, particularly in April and May, two or three trumpeter swans are generally seen in the Recreation Area.

Each year, one or more pair of harlequin ducks nest on lower Steep Creek. This species is listed as a Category 2 species with the US Fish and Wildlife Service. Category 2 species are those for which there is information indicating that the species may qualify for endangered or threatened status, but further evaluation is needed. Concern for this species has focused in the Pacific Northwest where their numbers are declining.

### **Songbirds**

Neotropical migratory birds, those that winter in Mexico, Central and South America, and nest in North America, are commonly found in the Recreation Area during the spring and summer. The Juneau Ranger District has conducted off-road point counts, a standardized monitoring system, in the Recreation Area since 1993. The data from these surveys is entered in a statewide data base designed to monitor state and national population trends. The Recreation Area is important to neotropical migrants as well as other small birds because of the relatively large amount of deciduous vegetation. These habitats are rare in northern Southeast Alaska and provide important breeding, and stop-over habitat for neotropical migrant bird species. Some species like the solitary vireo, American redstart, warbling vireo, gray-cheeked thrush, and Tennessee warbler are found only in widely distributed deciduous habitats in Southeast Alaska. Because the Recreation Area also contains other habitats, including mature spruce/hemlock stands, the overall diversity of songbirds in the area is high.

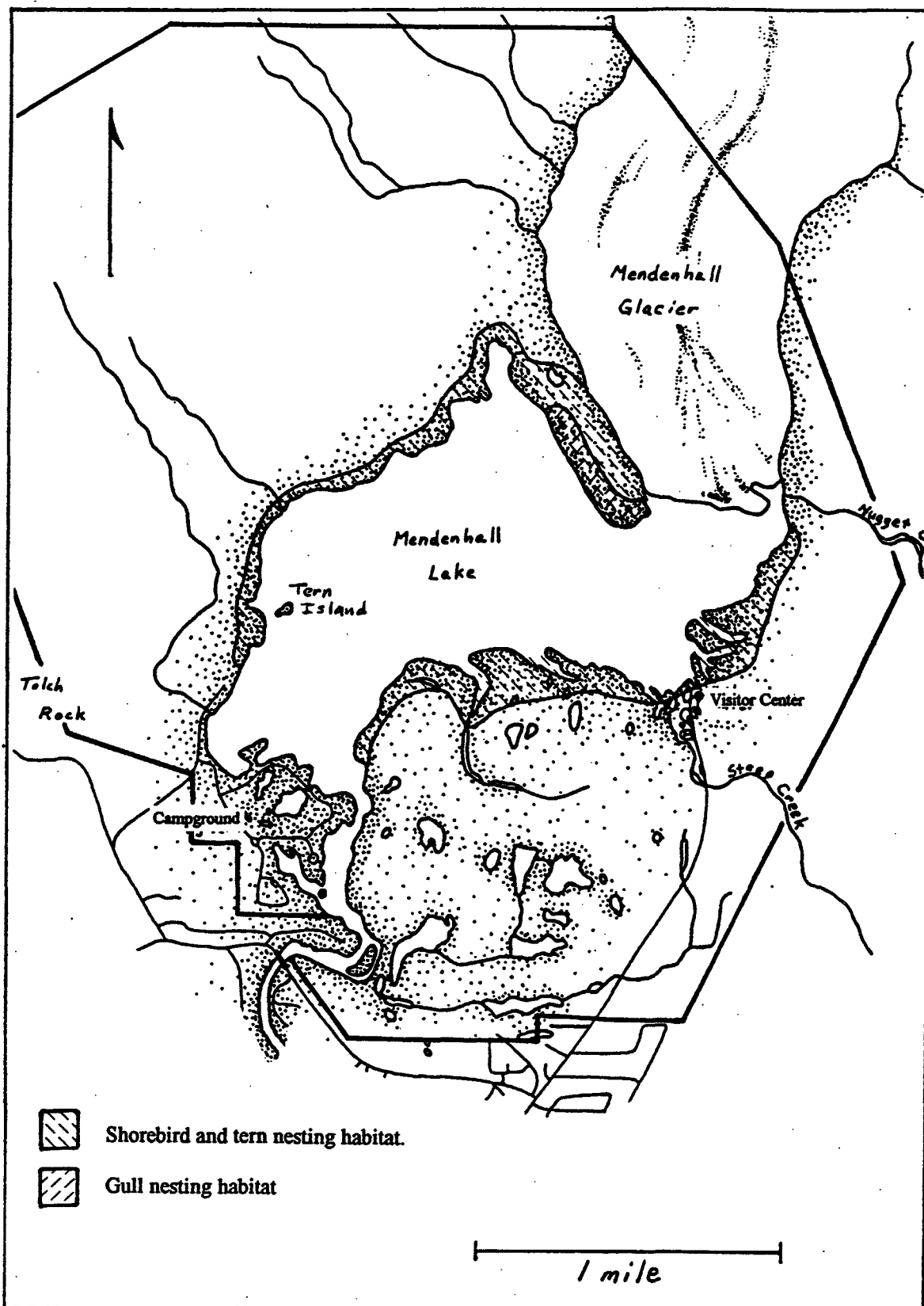
### **Shorebirds**

The glacial till substrates and vegetation free areas around Mendenhall Lake offer excellent nesting habitat for several shorebird species, particularly killdeer, spotted sandpipers, and semipalmated plovers. Spotted sandpipers are the most common shorebird in the Recreation Area and can be found not only along the lake margins, but also along the Mendenhall River and edges of ponds. Local birding experts have observed a downward trend in nesting least sandpipers, an uncommon species in the area (Gordon, 1994). Declines in nesting birds may be a result of habitat alteration by recreationists and disturbance of nests by people and their dogs. A total of approximately 140 acres of shorebird nesting habitat is located within the Recreation Area (Map 13). Currently, approximately 13.6 acres of nesting habitat have been disturbed by ORV's along the south shore of Mendenhall Lake.

### **Arctic Terns**

Arctic terns are uncommon breeders on the mainland in Southeast Alaska (Gibson and MacDonald 1975). All documented nesting in Southeast Alaska is associated with moraines at the mouths of glaciers (Godfrey 1976). Nest sites are frequently moved from year to year in response to predators and other factors (U.S. Fish and Wildlife Service 1978). Observations of this species were made in the Recreation Area in 1982, 1983, and 1984. The number of birds seen were forty, thirty, and ten respectively. The rock at the toe of the glacier on the west side of the lake was used by the majority

Map 13. Shorebird, Arctic tern, and gull nesting habitat.



of these birds. A few others were scattered along the entire shoreline of the lake. Because the west shore of Mendenhall Lake is bordered closely by tall brush and trees, it is probably not as valuable as tern nesting habitat on the south and east shores. In 1994 and 1995, a pair of terns were seen defending territories on the beach below Photo Point. This nest was not successful due to human harassment. A total of approximately 200 acres of potential tern nesting habitat is located within the Recreation Area (Map 13).

## **Gulls**

A small gull colony is located on the rock bluff at the toe of the glacier on the west side of the lake. Observations of this colony in 1982 found it to consist of 39 herring gulls, thirteen glaucous-winged gulls, two glaucous-winged/herring gull hybrids, two thayer's gulls, one mew gull, and seven unidentified gulls. Between sixty and seventy glaucous-winged gulls were observed at the site in 1993. One lesser black-backed gull was observed in 1993 and 1994. Lesser black-backed gulls are rare in the Juneau area. The gull colony consists of approximately thirty acres on the rock peninsula to the west of the glacier's face (Map 13).

## **Mammals**

Little is known about the small mammals that inhabit the Recreation Area. Keen's mouse and long-tailed vole are two species that have been identified, but there are no estimates of abundance. The mountains that surround the Recreation Area are home to mountain goats, hoary marmots, lynx, wolverine, coyotes, wolves, and red fox. These species are usually found high on the ridges outside of the Recreation Area boundary. Red fox, coyotes, lynx, and wolves do occasionally come down into the Recreation Area particularly in the winter months. Coyotes are seen in the glacial outwash area and on the southern Recreation Area boundary in the surrounding housing developments. River otter, mink, and beaver are common in and around the pond and stream habitats. Muskrats are also found in the water habitats but are uncommon. Black bears are common in the area, particularly along the salmon streams. Sign of black-tailed deer are occasionally seen in the area. Ermine, red squirrels, and porcupines are all common. There are no known Threatened or Endangered mammal species inhabiting the Recreation Area.

## **G. Existing Access**

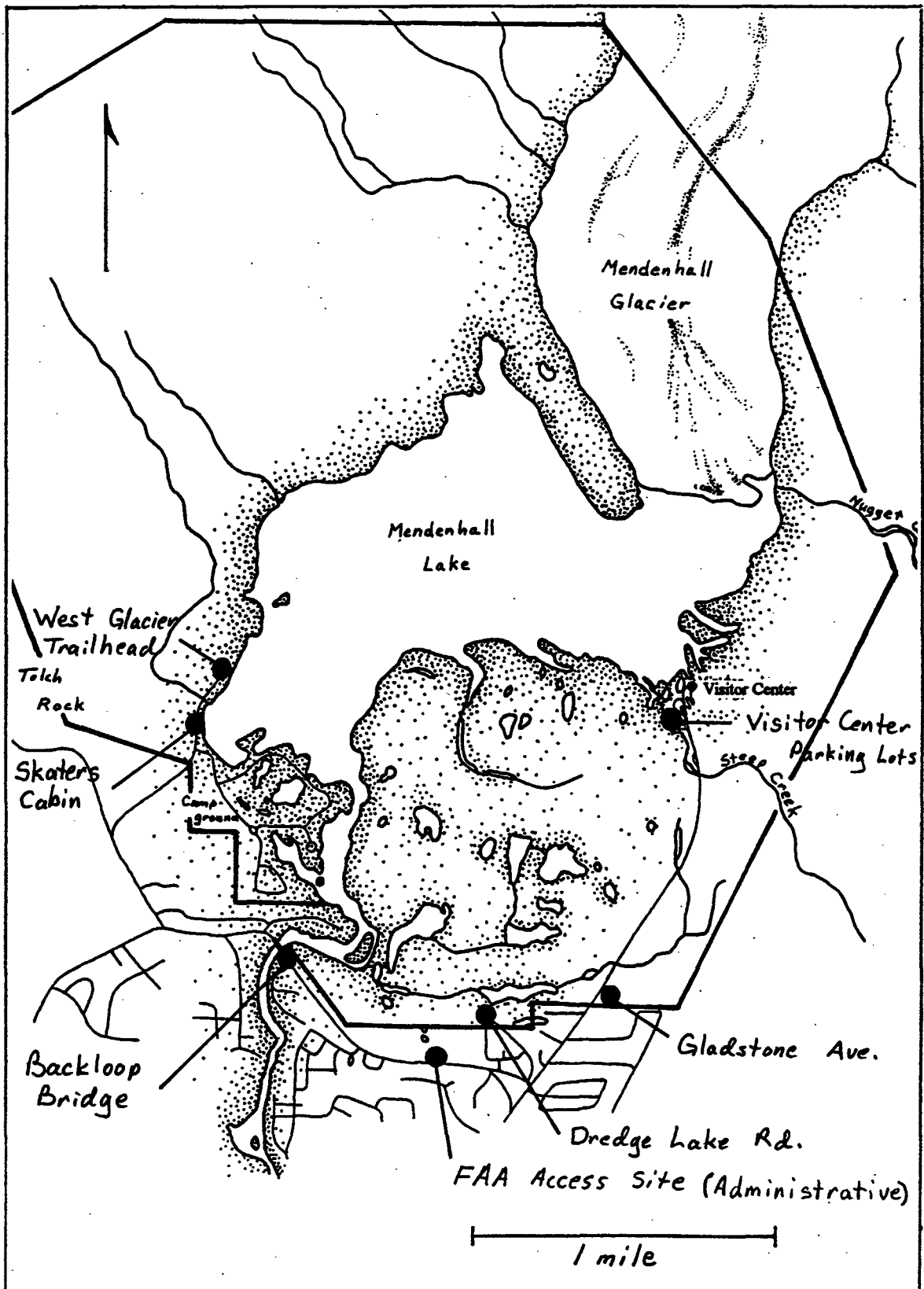
Recreation access to this area is provided through a variety of main arterials, residential roads, parking areas, trailheads, and trails (see Map 14). The following are the major trailheads and parking areas for the Recreation Area.

### **Mendenhall Glacier Visitor Center Parking Lots**

This day use site provides access to the Visitor Center and the covered viewing shelter. The Visitor Center parking lots also provide access to the Dredge Lakes Unit, and the East Glacier, Moraine Ecology, Photo Point, Nugget Creek, Powerhouse, and Dredge Lakes trails. In the lot closest to the covered viewing shelter, parking is available for 23 passenger vehicles and three motorcycles. An additional parking lot offers available parking for eight cars, nine recreational vehicles (RV's), and eight buses. To facilitate tour and school bus passengers, three bus off-loading areas are located near the kiosk (USDA Forest Service, 1995j).

As part of the Steep Creek Interpretive Trail project, an additional bus parking lot will be constructed which will accommodate thirty buses. The existing bus parking lot will be converted to a vehicle parking lot, accommodating approximately twenty more cars. When construction is completed, total area parking capacity will be approximately 51 cars, three motorcycles, nine RV's, and thirty buses (USDA Forest Service, 1992b; USDA Forest Service, 1995j).

Map 14. Existing access points to the Recreation Area.



### **Gladstone Avenue Trailhead**

This day use site mainly provides access to the Powerhouse Trail. Visitors can also access the Dredge Lakes Unit by walking approximately 0.25 miles along Glacier Spur Road to get to trails leading into Dredge Lakes. Parking is available for two or three passenger cars.

### **Dredge Lake Road Trailhead**

This day use site provides access to the Dredge Lakes Unit and Dredge Lakes Unit trails. Both motorized and non-motorized users use this trailhead to access the Dredge Lakes Unit. Parking is available for four passenger cars.

### **Administrative Site**

This day use site (previously call the old FAA site) off Back Loop Road provides access to the Dredge Lakes Unit and Dredge Lakes Unit trails. Parking is available for one or two passenger cars. This site serves as a secondary ORV trailhead.

### **Back Loop Bridge Trailhead**

This day use site provides access to the Dredge Lakes Unit, to the trails within the Dredge Lakes Unit, and to the Mendenhall River. Parking is available for seven passenger cars. This is the primary access for ORV users into the Dredge Lakes Unit. Boat launching into the Mendenhall River from this trailhead is difficult unless the boat is carried approximately 200 yards upriver.

### **Skater's Cabin**

This day use site provides access to Skater's Cabin, to the west side of Mendenhall Lake, and to Tolch Rock. There is parking for eight passenger cars. One vault toilet is located at this site.

### **West Glacier Trailhead**

This site provides access to the West Glacier Trail, McGinnis Mountain, and the west side of Mendenhall Lake. Parking is available for fifteen passenger cars and two buses. One rafting company, which operates under a special use permit, has a gated road access to the raft launch site on Mendenhall Lake. They also have a staging area and parking area for two buses and a chase vehicle. The rafting company provides two portable toilets at this site.

## **H. Recreation**

Having one of the most road accessible glaciers in the world has made the Recreation Area the third most visited attraction in the State of Alaska, and the second most visited Forest Service site in the Alaska Region. In 1993, the Mendenhall Glacier received over 331,840 visitors (both at the Visitor Center and visitors touring by helicopter on the glacier) from throughout the United States and many other countries (McDowell Group, 1993), as well as receiving numerous repeat visits from many of Juneau's 29,500 residents.

The area provides a wide variety of recreational opportunities including hiking, walking, sightseeing, rafting, canoeing, camping, horseback riding, ORV and snowmobile riding, model airplane flying, biking, cross-country skiing, wind surfing, bird watching, fishing, hunting, wildlife and scenery watching, photography, nature study, and environmental education. To facilitate and support recreation use, the Forest Service provides one developed campground, three developed day use sites, 2.9 miles of road and approximately 25 miles of trail, including 7.8 miles available for ORV use.

In addition to Forest Service facilities, there are numerous motels, grocery stores, specialty fast food and beverage establishments, restaurants, shopping malls, a theater, gas stations, and recreation equipment stores within a four mile drive of the area. Fourteen miles from the Recreation Area, downtown Juneau offers additional services.

## **Recreation Visitation and Use**

Recreation Area users are made up of both local visitors and out-of-town visitors. Local residents' use of the Recreation Area has increased steadily as the local population has grown. In 1960, the population of Juneau was 6,797, with 800 of those residents living in the Mendenhall Valley. When the Visitor Center was constructed in 1962, the Mendenhall Valley contained farms and large areas of undeveloped land. Since then, the Mendenhall Valley has been an area of rapid growth and urban development, transforming a rural area into Juneau's most extensive suburban community. Homes now border much of the southern boundary of the Recreation Area. In 1990, Juneau's population was 26,751, and in 1991, the City and Borough of Juneau estimated that 11,200 people lived in the Mendenhall Valley (USDA Forest Service, 1993).

Use levels have grown more dramatically from out-of-town users, primarily in response to the growing cruise ship tourism industry. In 1982, cruise ship visitation to Juneau was 87,358 (JCVB, 1995). By 1994, it had grown to 372,923, an increase of almost 427% (JCVB, 1995). Coupled with independent travelers arriving by Alaska State Ferry and airlines, visitation to Juneau during the summer tour season (May-September) was 533,701 in 1994 (JCVB, 1995a, 1995b).

With the population growth of Juneau, as well as increasing summer visitors to Juneau, there has been a corresponding increase in visitation to the Recreation Area, particularly at the Visitor Center.

In 1962, its first year of operation, visitation to the Visitor Center was estimated at 43,000 (USDA Forest Service, 1993). By 1965, visitation at the Visitor Center had reached 70,000 a year (USDA Forest Service, 1975). Forest Service estimates show the Visitor Center received 185,000 visitors in 1993 and 265,000 in 1994 and 1995. Based on industry projections, it is estimated over 315,000 people will visit the Visitor Center in 1996 (USDA Forest Service, 1996).

Visitor industry projections show continuing increases in the numbers of visitors coming to the Juneau area. An estimated 408,000 cruise ship visitors came to Juneau in 1995 and an estimated 470,000 will come in 1996 (JCVB, 1995; USDA Forest Service 1996). By the year 2000, the number of cruise ship visitors could reach 1.3 million (Juneau Empire, 1995).

The Recreation Area serves diverse groups of users with varying needs and desires. Visitor types and numbers change dramatically with the seasons. Many local residents view the Recreation Area, particularly the Mendenhall Glacier Visitor Center complex, as a community recreation resource. They use the area and facilities on a year-round basis, participating in a variety of educational and recreational activities. Since the Recreation Area is close to residential areas, use is similar to that of a community park. Residents hike, jog, bicycle, ride ORV's, hunt, fish, picnic, walk their dogs, attend education programs, and view spawning salmon and wildlife. Local residents also use the area for skiing, snowmobiling, sledding, hiking, skating and snowplay during the winter months (USDA Forest Service, 1993).

A wide variety of recreational uses take place in the Recreation Area. Quantifiable data on actual numbers of users per activity is not available, except use levels for commercial permits and limited trail survey data. The following is a summary of types of use in the Recreation Area and approximate levels of use where known.



**Table 3-2: Summary of Use in Recreation Area (1995)**

<b>Activity</b>	<b>Number of Visits</b>	<b>When Visits Occur</b>
Archery Use		All year
Biking/Mtn Biking		All year
Bird Watching		All year
Camping	36,600	Sp, S
Canoeing/Rafting		Sp, S, F
Cross-Country Skiing		W
Dog Walking		All year
Environmental Education		All year
Fishing		Sp, S, F
Group Gatherings		All year
Hiking	**4895	All year
Horseback Riding		Sp, S, F
Hunting		Sp, S, F
Ice Skating		W
Jogging/Running		All year
Kayaking		Sp, S, F
Model Airplane Flying		Sp, S, F
O/G Canoe Trips	160	Sp, S
O/G Hiking	14	Sp, S
O/G Rafting	25,700	Sp, S
O/G Sightseeing Tours	179,748	Sp, S
ORV Riding		All year
Photography		All year
Picnicking		Sp, S, F
Sightseeing		All year
Snowmobile Riding		W
Snowplay		W
Swimming		S
Walking		All year
Weddings		All year
Windsurfing		Sp, S, F

**Sp** = Spring

**S** = Summer

**F** = Fall

**W** = Winter

**\*\*** Number is from survey data obtained on the West Glacier Trail (1994)

## **Recreation Setting**

### **Recreational Opportunity Spectrum (ROS)**

The Recreational Opportunity Spectrum (ROS) class is a management system the Forest Service uses to set direction for purposefully managing environmental settings and the activities which can occur within them. ROS classes are guidelines which the land manager can use to manage and provide for the publicly desired recreation experience for an area. Seven different ROS classes are used, each describing the number of encounters between groups that one could expect and the kind of experience the recreationist will most likely have while using the area (see FEIS Appendix E for description of ROS class).

While the current Tongass Land Management Plan (TLMP) does not assign ROS classes to individual Land Use Designation (LUD) categories, the proposed Revised TLMP will set ROS standards for the

proposed LUD's. Under the expectation that ROS classes will be incorporated, the ROS designations for each unit within the Recreation Area as stated in the Proposed Action are adopted for this document.

### **Visual Quality Objective**

The potential visual impacts are a prime consideration in the management of the Recreation Area due to the high visibility of the area. Easy access from town and the popularity as a major stop for most of the commercial tours make it an area frequently viewed by most of Juneau's population, as well as most visitors to the Juneau area. The majority of the Recreation Area is visible in the foreground and middleground viewing distances of the Sensitivity Level 1 recreating public. The Mendenhall Glacier, Mendenhall Lake and River, and the surrounding area have been rated Variety Class "A", or having distinctive qualities inherent in the Coast Range Visual Character Type. These areas have been assigned a Visual Quality Objective of Retention.

Historically, the recreating public have been very concerned over maintaining the scenic attributes of the Recreation Area. Public scoping, conducted for past planning efforts, have echoed these concerns. Concerns have also been expressed for any proposed developments to be screened from views of recreationists on Mendenhall Lake and River.

Management direction recognizes the public's concern for high scenic quality and mitigates potential visual impacts. Adequate screening of future developments is achieved by removing only the existing vegetation necessary to allow construction and by the addition of new planting to achieve the desired result.

Enhancing the visual experience is accomplished through quality design and construction techniques. Components of form, texture and color are used in designs to harmonize developments within the Recreation Area with the surrounding landscape.

The Recreation Area is a very new landscape, just emerging from a barren rock and ice environment. Management of the area includes the use of color schemes which harmonize with the blues of the glacial ice, the milky, greenish blue of the glacier fed lake, various hues of brown and gray found in the scoured rock walls and numerous boulders, and with the numerous shades of green found in the vegetation. Natural, or natural appearing materials along with native plant species are also incorporated to achieve a quality view throughout the Recreation Area.

The architectural style of proposed buildings, structures, and project components is meant to be compatible with the historic Civilian Conservation Corps (CCC) style of building. The CCC era style of building included extensive use of rockwork, wooden beams, and heavy timbers. Modern design would be acceptable if similar materials, such as wood and stone, are predominant in the design.

Facilities within the Recreation Area are to be developed with as many unpaved and vegetated areas as possible. Developments are to be consistent with the ROS classification for the area. Facilities are to provide a sense of the surrounding characteristic landscape by utilizing elements within that landscape. Developments will also portray this new, emerging landscape by using exposed rock outcrops, glaciated boulders, and native early succession plant materials.

### **Facilities and Developed Recreation Sites**

Facilities are designed to promote or allow specific types of recreation activities and experiences. Some facilities, such as trailheads, are designed primarily to gain access to undeveloped areas. Others are designed primarily to provide a recreation experience at the facility itself, such as viewing platforms, picnic areas, interpretive sites, or overlooks.

In the Recreation Area, there is one overnight facility (Mendenhall Lake Campground), two developed recreation facilities (Skater's Cabin and the Visitor Center), 25.5 miles of trail, a designated ORV area, and seven access points.

### **Mendenhall Lake Campground**

The Mendenhall Lake Campground is located on the west side of the Recreation Area. It is approximately fourteen miles from downtown Juneau and six miles from the Alaska State Ferry Terminal. Mendenhall Lake Campground is one of only two Forest Service campgrounds on the Juneau road system and is the largest campground on the Juneau Ranger District. It also has the distinction of being the only overnight facility in the National Forest system which offers an opportunity to camp near the base of a glacier. Both out-of-town and local visitors use the campground for overnight visits.

The Mendenhall Lake Campground is approximately 142 acres in size. It was constructed in 1962 with a design capacity of 240 people at one time (PAOT). The season of use is generally May 15 to September 15, with the campground closed to camping during fall, winter and early spring. There are sixty camping units, with seven units available for backpack-access only where no motorized traffic is allowed. A total of seven 2-unit toilet facilities serve the campground. The user fee (1995) is \$8.00 per night.

Out of sixty sites, sixteen have views of Mendenhall Lake and the Mendenhall Glacier. The Mendenhall Glacier flows between Bullard Mountain and McGinnis Mountain to Mendenhall Lake, with the mountains rising abruptly to over 4,000 feet. As a result, this entire area has an abundance of superb Alaskan scenery.

Typically, overnight use of the campground is heaviest in July and August. On a few occasions, the entire campground is filled. The 1994 seasonal occupancy rate was 67%, with use levels of 36,600 visitors. Tent campers, as well as trailers and recreational vehicles, use this campground. The campground is also used year-round as a place for local residents to walk their dogs and/or jog. In the winter the road system is used for cross-country skiing and snowmobiling.

### **Skater's Cabin**

Located on the western shoreline of Mendenhall Lake, Skater's Cabin was built during the 1930's by the Civilian Conservation Corps (CCC), and served as the first glacier observation area in the Recreation Area. The site consists of a day use stone cabin, vault toilet, and three picnic sites.

The site is used primarily by visitors for picnicking, BBQ's, parties, sightseeing, photography, and as a put-in for canoes, kayaks, rafts, or windsurfing. In the winter, visitors cross-country ski, ride snowmobiles and ORV's, and also use the area for ice skating.

### **Mendenhall Glacier Visitor Center**

The Visitor Center is located on the eastern shoreline of Mendenhall Lake and is approximately fourteen miles from downtown Juneau. Because of the spectacular view that it offers of the Mendenhall Glacier, the Visitor Center receives the highest visitor use in the Recreation Area. The Moraine Ecology Trail, East Glacier Trail, Photo Point Trail, and the Trail of Time also begin here.

Visitation to the Visitor Center continues to increase with the increase in summer cruise ship visitors to the Juneau area. Forest Service estimates show the Visitor Center received 185,000 visitors in 1993, and 265,000 in 1994 and 1995.

The Visitor Center was originally built in 1962, and was designed for a capacity of 120 PAOT's (USDA Forest Service, 1993). Since that time, relatively few improvements have occurred. A switchback ramp was constructed in 1978 to improve access for physically disabled visitors and in 1989, new parking lots were constructed to remedy safety hazards associated with bus, auto and pedestrian traffic using the same area. A covered viewing shelter, information kiosk, and new bathroom facilities were also constructed at that time.

In 1993, PAOT capacity for the Visitor Center building was determined to be 163 PAOT's (USDA Forest Service, 1993). The Photo Point Trail and viewing area at the terminus of the trail has a capacity of 75 PAOT's. Other viewpoints near the Visitor Center have a 100 PAOT capacity. The covered viewing shelter has a capacity of sixty PAOT's and the bus passenger waiting shelter has a capacity of 65 PAOT's. The parking area restrooms have a capacity of fifteen PAOT's.

The total capacity for this area is 478 PAOT's. With most visitors staying approximately 45 minutes to one hour, in an eight hour day, approximately 3,824 people can be accommodated by existing PAOT design capacity. During the busy summer tourist season, it is now common for the Visitor Center to host approximately 3,000-4,000 visitors per day. This is approaching maximum PAOT capacity design for the existing site and facilities.

### **Developed Hiking Trails**

Non-motorized users have approximately 172.3 miles of developed trails for non-motorized use accessible from the Juneau road system. These trails are maintained by either the Forest Service, City and Borough of Juneau, Bureau of Land Management, or State of Alaska. Of the 172.3 miles of trail available to non-motorized uses that are accessed from the Juneau road system, 23.9 miles or 14% of these trails are in the Mendenhall Glacier Recreation Area (see Map 15).

Each Forest Service developed trail is assigned a maintenance level, and are maintained to standards found in the 1991 Alaska Region Trails Construction and Maintenance Guide. Levels are defined as follows:

#### **Level 1**

Applies to trails that need to be reconstructed or relocated to alleviate safety or resource problems, short-term trails that are left or obliterated to revert back to natural condition, and nominally used trails that are retained on the system. These trails are not maintained except that drainage is maintained to prevent damage to adjacent resources. Signs at intersections are checked periodically for condition. Even with minimal maintenance, use is permitted. Traffic is light.

#### **Level 2**

Resource protection, preservation of the trail investment, user safety, and continued use of the pathway in its present location is the objective. Work is not deferred (to the extent budgets allow) to the point of creating a backlog of reconstruction work. Volume of traffic is light to medium. Brushing occurs to delineate pathway and to remove downfall that cannot be stepped over. Tread maintenance occurs for slide and slump removal and to keep drainages functioning. All drainage structures such as: waterbars, culverts, ditches, dips and bridges are maintained. Signs are provided and maintained.

#### **Level 3**

Resource protection, protection of the investment, and user safety is the objective. Trail is maintained to its design standard (as budgets allow). These trails may have mechanized mode of travel. Traffic is medium to heavy. All maintenance activities described in Level 1 and Level 2 are performed with the addition of tread grading, rock removal, spot surfacing.

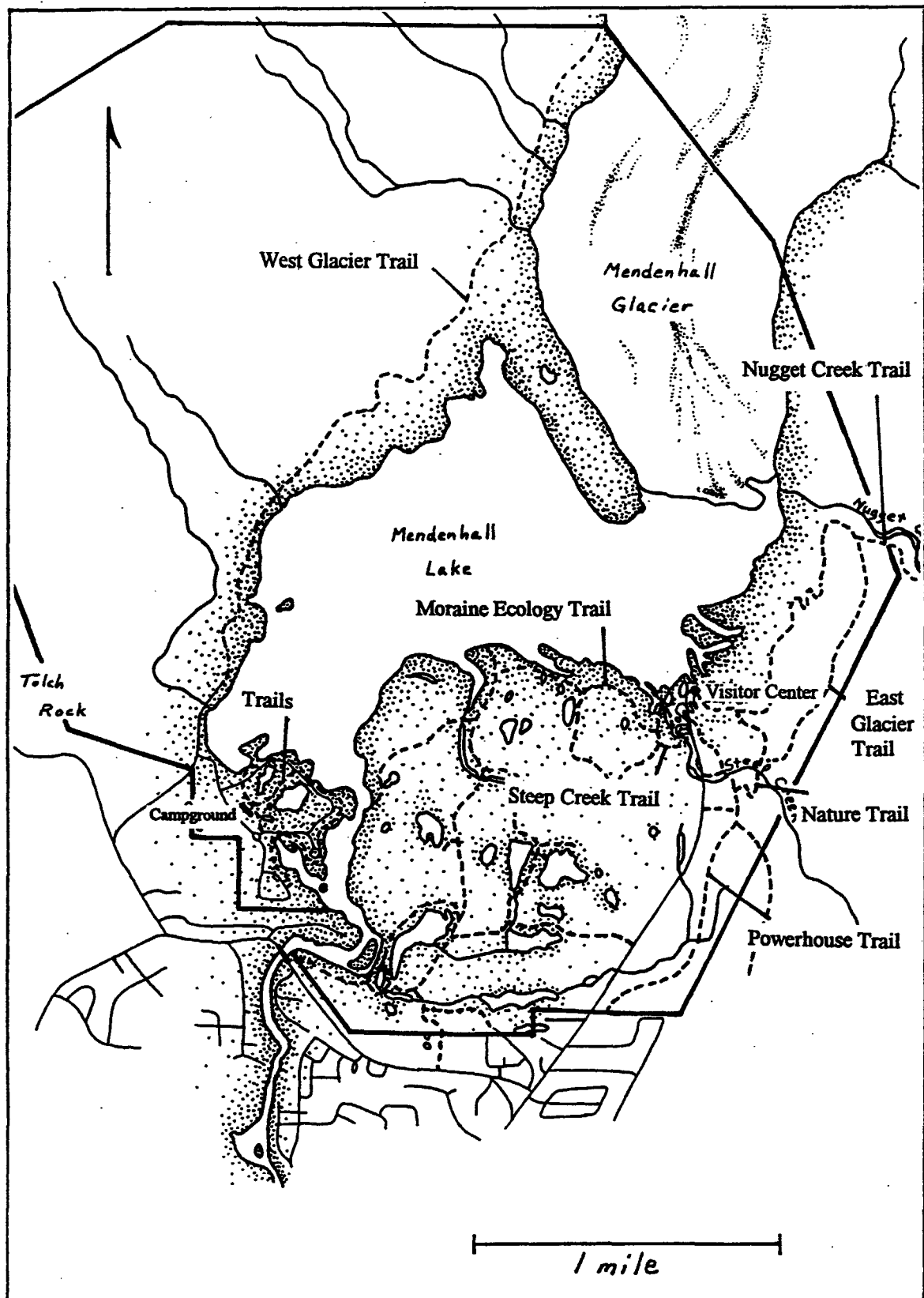
#### **Level 4**

Resource protection, protection of the investment and the safety, comfort and convenience of the user is the objective. Traffic is heavy. Tread smoothness is provided to safely accommodate the allowed use. Where trails are paved, the paved surfaces are maintained. All of the other maintenance items described in Levels 1-3 occur (as budgets allow).

#### **Level 5**

The objectives and maintenance work for these trails is the same as Level 4. These trails are generally found in Recreation Opportunity Spectrum (ROS) class defined as urban or rural. These trails receive very high use. This type of trail includes special purpose trails such as interpretative bicycle, ORV,

**Map 15. Major developed trails within the Recreation Area.**



vista point access, wheelchair access trails. Trail sides are maintained to meet high visual quality standards by brushing and clean-up of debris beyond the trail clearing limits (as budgets allow). Vistas may also be maintained.

The maintenance levels for the trails identified below are the planned trail maintenance levels. The current level the trail is maintained at is displayed in parenthesis next to the planned trail maintenance level.

Table 3-3: Trail Maintenance Levels

Trail Name	Maintenance Levels	Length (miles)
Back Loop Spur Trail	1	0.3
Dike Trail	1	1.3
Dredge/Crystal Lake Trail	1	1.3
East Glacier Trail	3 (2)	3.5
Glacier Rock Pit Trail	1	0.5
McGinnis Mtn Trail	na	2.0
Mendenhall River Loop Trail	1	0.5
Moose Lake Trail	1	0.5
Moraine Ecology Trail	4 (4)	1.7
Moraine/Glacier Lake Trail	1	0.5
North Lake Spur Trail	1	0.3
Nugget Creek Trail	3 (3)	3.0
Outer Moraine Loop Trail	1	1.8
Photo Point Trail	5 (5)	0.3
Powerhouse Trail	4	1.3
Trail of Time	4 (3)	0.5
West Glacier Trail	3 (3)	3.0
West Moose Lake/River Trail	1	1.8
<b>Total</b>		<b>23.9</b>
<b>Trails approved for future construction</b>		
Steep Creek Trail	5	0.50
Mendenhall Campground trails	4	1.00

(na means no assigned maintenance level)

Trails within the Recreation Area make up varying percentages of the total trail system available in Juneau. The following tables show trails within the Recreation Area and difficulty levels, and how the Recreation Area trail system compares with the rest of the Juneau road system.

**Table 3-4. Trails Within the Mendenhall Glacier Recreation Area**

<b>Trail Name</b>	<b>Miles</b>	<b>Hike</b>	<b>Bike</b>	<b>Ski</b>	<b>Horse</b>	<b>Summer Motor</b>	<b>Winter Motor</b>
Back Loop Spur	0.3	Easy	Easy	Easy	Easy	Easy	Easy
Dike Trail	1.3	Easy	Easy	Easy	Easy	Easy	Easy
Dredge/Crystal Lake Trail	1.3	Easy	Easy	Easy	Easy	Easy	Easy
East Glacier Trail	3.5	More					
Glacier Rock Pit Trail	0.5	Easy	Easy	Easy	Easy	Easy	Easy
McGinnis Mt. Trail	3.4	Most					
Mendenhall River Loop	0.5	Easy	Easy	Easy	Easy	Easy	Easy
Moose Lake Trail	0.5	Easy	Easy	Easy	Easy	Easy	
Moraine Ecology Trail	1.7	Easy		Easy			
Moraine/Glacier Lake Trail	0.5	Easy	Easy	Easy	Easy	Easy	
North Lake Spur	0.3	Easy	Easy	Easy	Easy	Easy	Easy
Nugget Creek Trail	3.0	More					
Outer Moraine Loop	1.8	Easy	Easy	Easy	Easy	Easy	Easy
Photo Point Trail	0.3	Easy					
Powerhouse Trail	1.3	Easy	Easy	Easy	Easy		
Trail of Time	0.5	Easy	Easy	Easy			
West Glacier Trail	3.0	More			More		
W.Moose Lake/River Spur	1.8	Easy	Easy	Easy	Easy	Easy	Easy

From: The Juneau Trails Plan, January 1993;  
JRD Trail Inventory 1996

Difficulty Levels:  
Easy  
More Difficult  
Most Difficult

**Table 3-5. Mendenhall Glacier Recreation Area Trail Comparison**

<b>Use</b>	<b>Total Miles within Recreation Area</b>	<b>% of Total Juneau Road System Trails</b>	<b>% of Total Forest Service Trails</b>
Hike	23.9	14%	23%
Bike	10.6	19%	26%
Ski	12.3	9%	16%
Horse	13.1	66%	100%
Summer Motor	7.8	100%	100%
Winter Motor	7.8	27%	46%

Accurate estimates of total year-round numbers of users on trails in the Recreation Area have not been determined. Due to the high numbers of visitors from cruise ships in the summer months, Photo Point Trail, the Trail of Time, Moraine Ecology Trail, and East Glacier Trail probably receive the highest use of any trails on the Juneau road system.

West Glacier Trail is the only trail described above that has had a use survey completed. During the summer of 1994, a trail registration box was posted and comments recorded. According to this survey, approximately 4,895 persons traveled this trail during the 1994 summer season for an average of 33 persons per day (USDA Forest Service, 1995k). The survey determined an average of twelve groups travel this trail per day with an average group size of 2.7 persons. It is likely that the other trails within the Recreation Area (with the exception of those immediately adjacent to the Visitor Center) receive similar levels of use. Trails adjacent to the Visitor Center most likely receive much higher levels of use, due to the large numbers of visitors in the area.

### **ORV Use Area/Dredge Lakes Unit**

On the Juneau Ranger District, year-round ORV use is authorized only in the Dredge Lakes Unit (see Map 3). This area is approximately 207 acres in size and consists of relatively undeveloped trails, with ORV users creating many trails outside the the designated area. An open "gravel pit area" is approximately 40 acres in size, and consists of gravels and cobbles and is well drained. ORV users have created small jumps and dips in this area. The Dredge Lakes Unit is the only area on National Forest accessible from the Juneau road system where summer motorized use on trails is allowed (see Table 3-4).

In the spring, summer, and fall, ORV users have 7.8 miles of trail and 207 acres designated for ORV use along the Juneau road system, which is entirely located in the Recreation Area. Because of steep terrain, wet soils, and a lack of flat, open area, easily accessible acreage open to ORV's in the Juneau area is limited. Including the Dredge Lake Unit, the area around Eagle Beach, the Thane tideland area, and the Montana Creek Road (from the bridge to the trailhead) are the only acreages accessible, accounting for approximately 400 acres open to ORV's.

During the winter, the Dredge Lakes Unit and roads in the Mendenhall Lake Campground are open to ORV and snowmobile use, when snow pack is over twelve inches. The west side of Mendenhall Lake, when frozen, is also open to winter ORV and snowmobile use. For motorized winter recreation use, the Juneau Ranger District has a total of seventeen miles of trail, 2.5 miles of road, and 5,280



acres which ORV's and snowmobiles may travel when the snow pack is over twelve inches, not including Mendenhall Lake. Of this total, approximately 207 acres (4%) and 2.5 miles of road and 7.8 miles of trail (46%) are located within the Recreation Area.

The State of Alaska does not require ORV users to register their vehicles, therefore, a total number of ORV users in the Juneau area has never been accurately determined. A local ORV dealer indicated that sales of ORV's have either held steady or declined, with only three sold in 1994 (pers. commun, R. Days, 1995). The dealer stated that most ORV's are bought as work vehicles, and approximately twelve vehicles are repaired per year. ORV sales have remained relatively constant over the past two years.

ORV's are not allowed on State Park System lands, however State Department of Natural Resources lands are open to ORV use unless they cause resource damage. The 150 acre gravel pit located between the Eagle River and the Eagle Beach Picnic Area and the adjoining tidal area is used often by ORV's.

City and Borough of Juneau lands are not open to ORV use unless designated. There are no designated ORV areas on City and Borough of Juneau lands at this time.

#### **ORV Use Conflicts**

Conflicts between motorized and non-motorized users have been occurring in the Recreation Area for many years, even prior to the adoption of the 1975 Management Plan. User conflicts often arise when users who desire different degrees of solitude use the same trails and/or areas. Conflicts arise because of trail encounters among different users. Non-motorized trail users generally do not desire to share trails with motorized users. They have concerns regarding dust, noise and safety hazards which accompany motorized vehicles. They may have concerns with erosion on trails and damage to vegetation. Motorized users on the other hand generally perceive no problem sharing a trail with hikers and other non-motorized users.

During public scoping for this EIS, comments from non-motorized users discussed safety concerns (reckless riding, high rates of speed, encounters on blind corners, near misses), noise, incompatibility of recreation experiences (motorized vs. non-motorized), and degradation of fish and wildlife habitat as well as vegetation damage.

Comments from ORV users discussed that the Dredge Lakes Unit is the only legal place for ORV riders to go, that there was a need for additional ORV use areas in Juneau, and a need for an ORV area with trail diversity, challenge, places to be able to go "all out," and places that offered end destinations for ORV users (i.e., a place with views of the glacier). Other comments from the ORV workshop also indicated that some ORV users were riding in closed areas due to inadequate open areas in the Recreation Area.

Similar user conflicts regarding motorized and non-motorized use exist between cross-country skiers, snowmobiles, and ORV users as those described above. Also, ORV's and snowmobiles, when traveling over ski trails will obliterate the ski track, affecting a nordic skier's experience because they usually prefer the easier skiing in tracks made by other skiers or track setting machines.

Vehicle noise, from both snowmobiles and ORV's, increases when there are more miles of trails and more acreage of ORV areas. Other recreationists and adjacent residents have voiced concerns that this noise intrudes on the quiet and solitude of either their recreation experience or neighborhoods.

#### **ORV User Demand**

Based on public comments received and comments at the ORV workshop, the current ORV designated area is not meeting ORV user demand. The Recreation Area does not provide a diversity of opportunities and challenge or a quality recreation destination for ORV's.

Based on discussions with a local ORV retail supplier, the number of ORV's sold annually in Juneau has remained constant and has not increased during the past two years. However, based on public comments received during scoping and the ORV workshop, the current available ORV use areas in the Recreation Area and in other locations accessed from the Juneau road system do not meet demand.

### **ORV Use Impacts**

Because of this excess demand, ORV users will likely continue to travel in closed areas within the Recreation Area as they have in past years. This would result in continued illegal ORV use and impacts. These impacts would likely be soil compaction, vegetation damage, silting of streams and ponds, noise, exposing of tree roots causing tree injury or death, and erosion from tire tracks. All of these impacts are the result of wheel to ground impact from continued ORV use over a trail or area.

These effects of ORV use also occur in the designated ORV use area in the Recreation Area. These effects in both the open and closed ORV areas of the Recreation Area will likely continue, however the magnitude of these effects is a function of the number of ORV trails and size of ORV areas. The more trail and/or the larger the areas, the greater amount of wheel to ground impact would occur, resulting in greater impact.

Winter ORV use occurs when there is twelve inches or more of snow to operate ORV's and snowmobiles. During these times, the area is usually frozen hard and vegetation is buried underneath the snow. Because soils and vegetation are not exposed due to snowcover, soil and vegetation impacts from snow machines are minimal.

### **Illegal ORV Use**

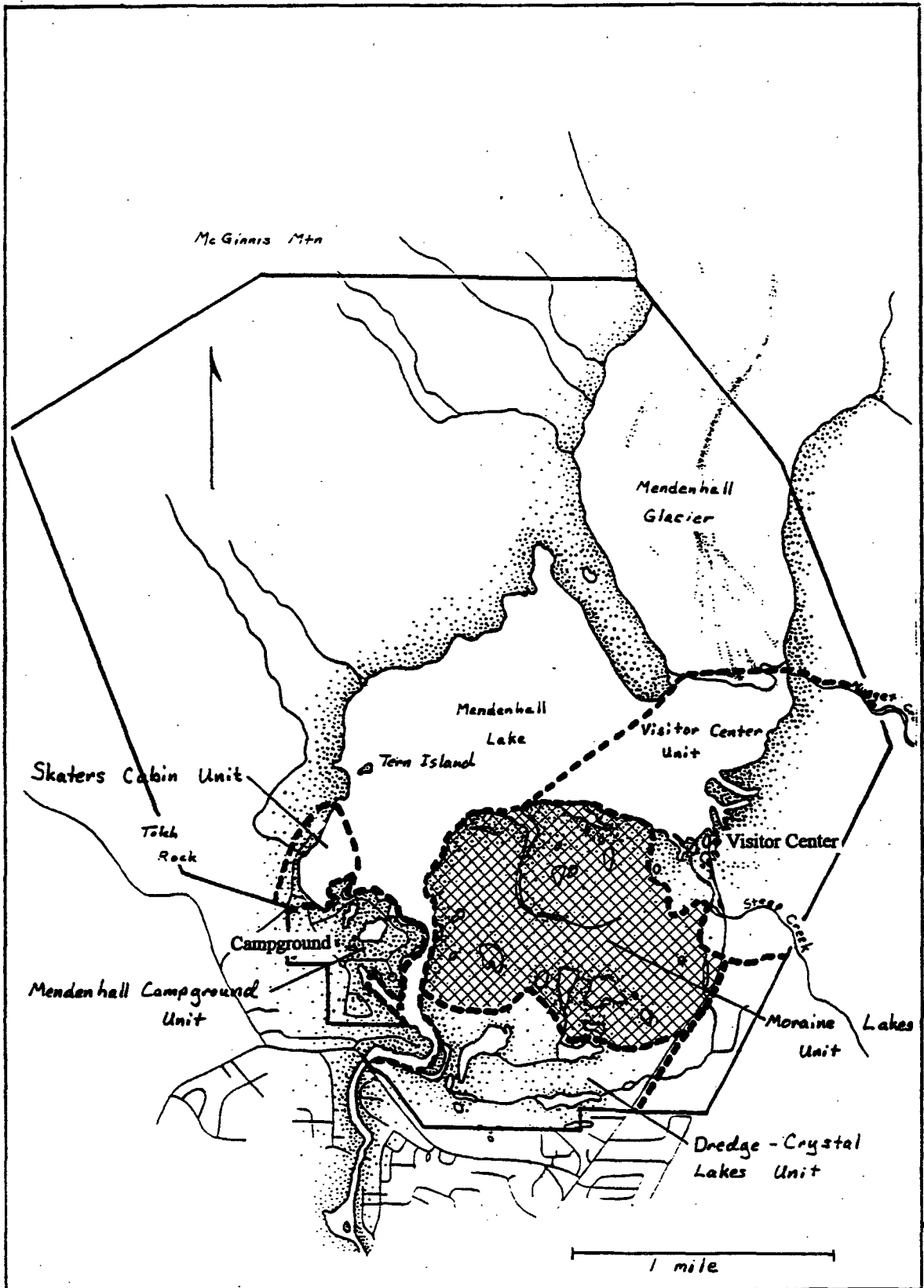
Approximately 3.6% (207 acres) of the Recreation Area is set aside for ORV use, however, another 9.4% (545 acres) is receiving illegal ORV use (see Map 16).

The Juneau Ranger District has never had an employee or law enforcement officer fully dedicated to managing or patrolling this area and enforcing existing regulations. Patrols that have occurred have been irregular, primarily during business hours and days and occasionally on weekends. Access points into the Recreation Area, and the ORV area boundary in the Dredge Lakes Unit have been repeatedly posted but because of vandalism, signs and area maps have been destroyed or torn down, making it difficult for some ORV users to determine exact closure boundaries. Lack of a geographical boundary has also made it difficult to determine exact ORV area boundaries. Numerous efforts to create physical barriers (rock barriers, berms, metal grating) between the open ORV area and the closed ORV area have been unsuccessful, as some ORV users have winched boulders and rocks out of the way as well as cutting out new access trails to access the closed area. A trail ranger program was also initiated at one time, but was not successful in deterring illegal ORV use in the Moraine Lakes Unit.

Law enforcement contacts have been made and citations have been issued, however law enforcement effort has not been consistent. This has resulted in a lack of information and contact provided to ORV users, and much illegal ORV use has occurred outside of the designated ORV areas. For the same reasons, new pioneer trails and areas have been developed both by physical manipulation of the vegetation and soil using saws and shovels and by use of ORV's traveling in previously unused areas.

Other National Forests operate successful ORV programs, with designated ORV trails and ORV areas. These programs usually require intensive management and receive support from organized ORV user groups that help self-regulate and "police" other users, as well as help with ORV trail construction and facilities. For these programs, ORV program management costs can be high and usually require a minimum of two full time law enforcement "ORV rangers" to be out on the ground and working with motorized user groups. These Forest Service programs also work in partnership with their respective states, which usually have state ORV gas tax monies available to help build ORV areas, trails, and campgrounds, and to support education and enforcement efforts. The State of

**Map 16. Area that is currently receiving illegal ORV use.**



Alaska does not levy a gas tax for ORV use, and thus does not have funds available to help supplement Forest Service management.

### **Other Motorized Uses**

In addition to ORV's, other motorized recreation use occurs in the designated ORV area. Motorized model airplanes and float planes are used within this unit, with approximately twenty to thirty model airplane club members in the Juneau area.

Motorized boat use on Mendenhall Lake and Mendenhall River has been limited. This is primarily due to the lack of access and launch facilities. Some motorized boat use occurs on an intermittent basis, and indications are that jet boats have recently begun traveling upriver to the lake.

### **Firearm Use and Hunting Opportunities**

The Recreation Area offers different hunting opportunities from other duck hunting areas near the Juneau road system. Most duck hunting in the Juneau area takes place on the Mendenhall Wetlands State Wildlife Refuge. A majority of the refuge is tidal mud and grass flats. The refuge also receives heavy hunting pressure. Because the refuge is dominated by tidal wetlands, hunting often requires a retrieving dog, hip boots or chestwaders, knowledge of the tides, and decoys. Because the duck hunting in the Recreation Area is in the uplands with numerous kettle ponds and well drained soils, the hunting experience is quite different.

In the Recreation Area, the numerous ponds and taller vegetation make it possible to jump shoot rather than shoot over decoys. It is generally not necessary to have a dog to retrieve birds and the area currently receives less pressure than the refuge. Other upland areas exist along the Juneau road system to hunt ducks, but most of them are at least ten miles north of the Mendenhall Valley. For these reasons, the Recreation Area is suitable for beginning hunters to gain experience.

Waterfowl hunting currently takes place in the Recreation Area from the beginning of the waterfowl season (September 1) until ponds freeze up (usually the end of October to mid-November). Most hunting also takes place in the early morning hours, when few other users are in the Recreation Area.

The maximum effective range for shotguns loaded with duck loads is about 75 yards. Beyond this distance, it is unlikely that a person would be hurt if hit by pellets discharged from a shotgun because of the pellets' small size and reduced velocities. One of the safety concerns related to hunting is that there are numerous small trails throughout the Recreation Area. Hunters may not know where these trails are and, when shooting at game, it would be possible to unknowingly put a person traveling on a trail at risk. Another concern is mishaps that could result from accidental discharge of a firearm.

Opportunities to hunt ptarmigan and blue grouse exist on the east slopes of Mt. McGinnis within the Recreation Area. The heavy timber on the lower elevations offer opportunities to hunt blue grouse in the spring. Hunting grouse in the spring usually entails locating displaying male birds high in the spruce trees. The firearm of choice is often a .22 caliber rim-fire rifle. Shots are usually made at a high angle, so there is little danger of people accidentally passing through the hunter's line of fire. The ptarmigan and grouse season currently runs from August 1 through May 15. Spring grouse hunting generally takes place from the beginning of April through the end of the season in May.

From August until snow conditions prohibit access, ptarmigan and blue grouse are available for hunting at and above tree line on Mt. McGinnis. This type of hunting generally involves the use of shotguns for flushing birds.

Statistics from the National Safety Council show that in 1988, deaths related to firearm use on public lands occurred in this country at a rate of 2 per 1,000,000 population. This includes firearm accidents in public places, including hunting accidents. There have been no reported firearm injuries in the Recreation Area.

## **New Facilities Improvements in Progress**

There are a number of planned improvements in the Recreation Area that have already undergone public involvement and the NEPA process. These projects have been approved, and will begin in the next few years, funding dependent. They include:

- construction of the Steep Creek Fish Viewing Interpretive Trail which will include approximately 0.25 miles of accessible trail with observation platforms (Forest Service, 1992b).
- expansion/improvements to Visitor Center, adding approximately 5,500 square feet to existing building and increasing design capacity to 696 PAOT; with Steep Creek Fish Viewing Trail, design capacity at Visitor Center site will be 896 PAOT (Forest Service, 1992b, 1994).
- improvements to the Visitor Center sewage/utility systems which will involve a hookup to the city sewer system (Forest Service, 1994).
- reconstruction of Photo Point Trail to a fully accessible trail (Forest Service, 1994).
- reconstruction of East Glacier Trail.
- reconstruction and renovation of Mendenhall Lake Campground which will result in several upgrades including city sewer and water, a new group shelter, and new campsites (Forest Service, 1993b).
- construction of shoreline loop trail/interpretive trails at Mendenhall Lake Campground (Forest Service, 1993b).
- renovation of the Skater's Cabin site and trails; shoreline armouring (Forest Service, 1993b).

## **I. Law Enforcement**

From March 1990 to March 1995, 564 officially reported incidents (those reported to law enforcement agencies or filed by the Forest Service) took place in the Recreation Area. On average, during this five year period, there was a reportable incident every 3.2 days in the Recreation Area, not including informal comments or public complaints made to the agency.

Of the reported 564 incidences, 96% took place at the following sites: Visitor Center (31%); Skater's Cabin (22%); Mendenhall Lake Campground (12%); Dredge Lake Road Trailhead (9%); Dredge Lakes (9%); West Glacier Trailhead (8%); and Moraine Lakes (5%). The major activities reported were: vandalism (24%); ORV's (19%); illegal dumping (10%); pallet fires (7%); parties (6%); litter (5%); vehicles (5%); theft (4%); and discharge of firearms (3%).

A summary of incidents are shown in the following tables.

Table 3-6: Location of Incidents (1990-1995)

Site	Forest Service Report	Juneau Police Dept. Report	Alaska State Trooper Report	TOTAL
Visitor Center	153	14	6	173
Skater's Cabin	76	21	28	125
Mendenhall Campground	37	14	14	65
West Glacier Trailhead	45	0	0	45
Skater's Cabin Road	2	3	0	5
Dredge Lake Road Trlhd	22	30	0	52
Dredge Lakes Unit	13	31	6	50
Moraine Lake Unit	28	0	0	28
Mendenhall River Access	7	0	0	8
Administrative Site Trlhd	6	0	0	6
Gladstone Avenue Trlhd	1	0	0	1
Glacier Spur Road Trlhd	6	1	0	8
<b>TOTAL</b>	<b>396</b>	<b>114</b>	<b>54</b>	<b>564</b>

**Table 3-7: Major Reported Incidences by Type and Location (1990-1995)**

Site	Vandalism	ORV's	Dumping	Pallet Fires	Firearms	Litter	Theft	Parties	Vehicles Speed/ Reckless
Visitor Center	70	47	3	0	2	2	7	0	14
Skater's Cabin	34	1	10	21	0	14	1	30	1
Mendenhall Cmpgnd	18	0	3	1	0	1	12	0	1
West Glacier Trlhd	4	1	17	12	0	9	1	0	0
Skater's Cabin Rd	0	0	1	1	0	0	0	0	3
Dredge Lk Rd Trlhd	15	13	9	1	1	2	0	0	8
Dredge Lakes	0	11	4	1	16	1	0	6	0
Moraine Lakes	0	28	0	0	0	1	0	0	0
Mendenhall Rvr Access	0	0	7	0	0	0	0	0	0
Administrative Site	6	0	0	0	0	0	0	0	0
Gladstone Ave Trlhd	0	0	0	0	0	0	0	0	0
Glacier Spur Trlhd	3	0	2	0	0	1	0	0	2
<b>Total</b>	<b>150</b>	<b>101</b>	<b>56</b>	<b>37</b>	<b>19</b>	<b>30</b>	<b>21</b>	<b>36</b>	<b>29</b>

In 1995, law enforcement efforts increased with the hiring of law enforcement officers to patrol the district. Increased law enforcement presence has resulted in more citations being issued, with four to five arrests. Vandalism throughout the district has been reduced to the lowest level in three to four years, though some vandalism is still occurring. In past years, vandalism costs in the Recreation Area have been estimated at over \$10,000-15,000 a year.

## **J. Commercial Uses and Tourism**

Certain areas of National Forest System lands which are not designated as wilderness but contain outstanding examples of plant and animal communities, geological features, scenic grandeur, or other special attributes merit special management. These special areas, of which the Mendenhall Glacier Recreation Area is one, are managed to emphasize recreational and other specific related values. Other uses are permitted in the areas to the extent that these uses are in harmony with the purpose for which the area was designated. In special areas, the Forest Service is to provide for public use and enjoyment of each special area up to the level that will ensure protection of the special values for which the area was established. Occupancy and use are allowed to the extent that neither interferes with the primary values of the area, nor negatively affects the visitor's experience. Special use authorizations, such as those granted for commercial use, may be granted in areas classified for recreational purposes, provided the uses are compatible with the purposes for which the area is classified (USDA Forest Service, 1990c).

In recent years, the number of summer visitors to the Juneau area has grown dramatically. In 1982, cruise ship visitation to Juneau was 87,358 (JCVB, 1995). By 1994, it had grown 330%, to 372,923 visitors. Coupled with independent travelers arriving by Alaska State ferry and airlines, visitation to Juneau during the summer tour season (May-September) was 533,701 in 1994 (JCVB, 1995a, 1995b). In 1995, total cruise ship visitation to Juneau was 380,529 and in 1996, cruise ship industry projections show an increase of 10% in numbers over 1994 and 1995, resulting in over 410,000 cruise ship passengers arriving in Juneau (Juneau Empire, 1996).

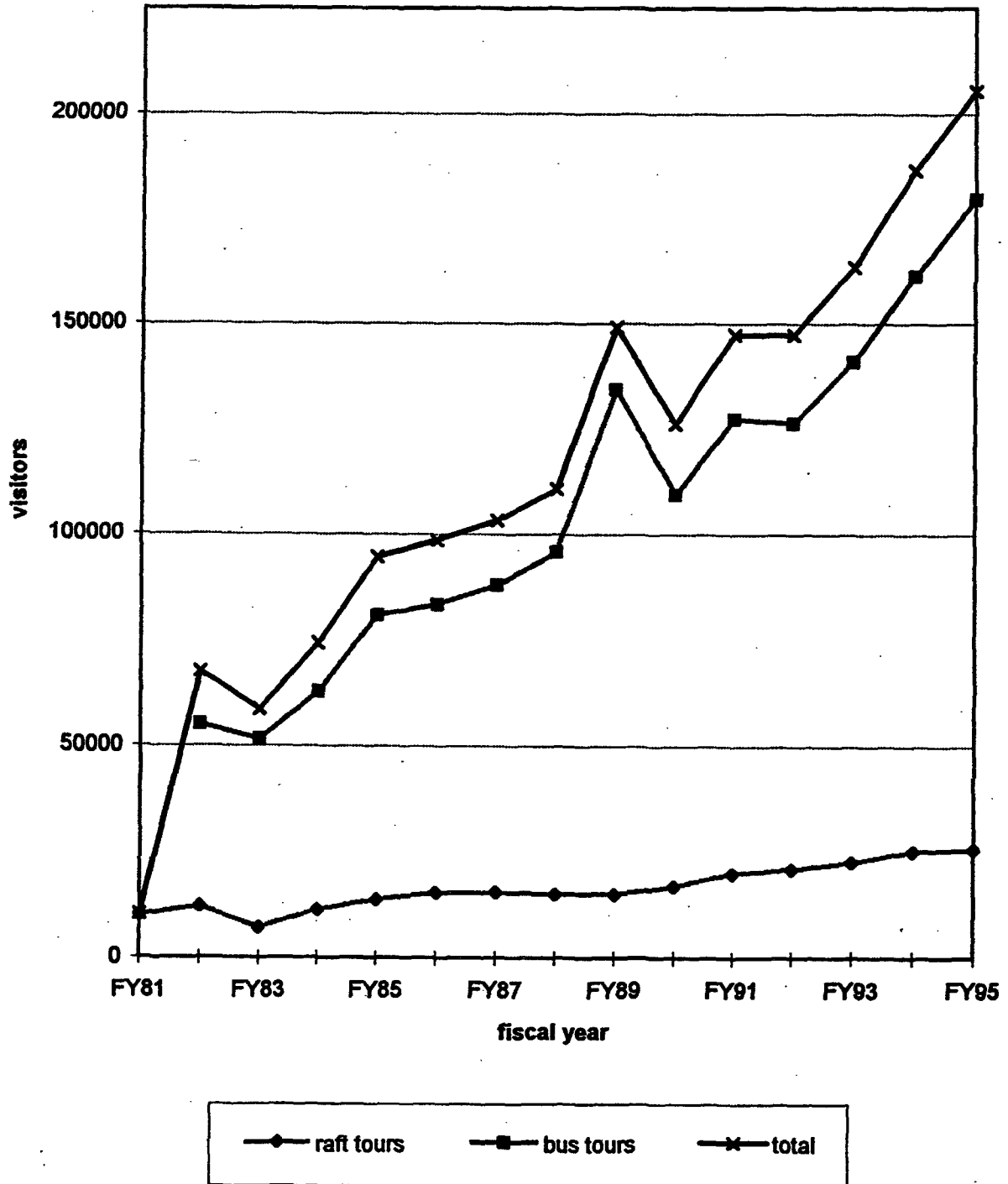
With increasing visitation to Juneau, there has been a steady increase in visitation to the Mendenhall Glacier Recreation Area. In 1981, commercial raft tours began, taking 10,000 visitors down the Mendenhall River. In 1982, bus tours began at the Visitor Center, with 55,000 people brought out on tour. By 1995, authorized use levels had increased to 25,700 for rafting tours and 179,748 for bus tours (see Graph 3-1).

With increasing use, public concern has grown that the amount of authorized commercial uses (tourism, outfitter/guide ventures) is negatively affecting the recreational experience within the Recreation Area. Negative impacts include crowding, capacity of the infrastructure and facilities to accommodate use, degradation of the visitor experience, and public health and safety concerns with overcrowding. There is also a high interest for more commercial use at the Visitor Center as well as throughout the entire Recreation Area.

A commercial use, as defined by the Forest Service Handbook (FSH, 2709.11a) is a commercial enterprise operating on National Forest System lands under special use permit for the purpose of providing goods and services to the general public. For commercial use to be allowed on National Forest System Lands on the Juneau Ranger District, the use must conform with the Tongass Land Management Plan (TLMP), meet Forest Service special use criteria, and go through NEPA analysis. For the Recreation Area, TLMP incorporates the 1975 Management Plan direction, which only allows commercial use that is compatible with the Recreation Area values of managing for a near natural environment with an emphasis on glacial and aesthetic values. No commercial developments or facilities are allowed.



**Graph 3-1. Commercial tour use levels in the Recreation Area.**



Existing commercial uses within the Recreation Area include guided hiking, helicopter tours, river rafting, bus/van tours, guided canoe and kayak trips, commercial advertising photography (outdoor clothing catalogs, product shots), and commercial media filming (QVC, Wheel of Fortune, Good Morning America). Requests for or interest in new types of commercial use include horseback riding tours, bike tours, gold pan tours, motorized boat tours, hydrobike tours, Tlingit canoe tours, snowtractor glacier tours, recreational equipment rental concession, food/beverage service cart concessions, and a tourist barge concession.

As noted above, commercial use in the Recreation Area has grown steadily over the past ten years. In 1985, a total of 77,659 service days (one service day is any portion of a day that a commercial company provides the permitted service to one client) were requested by commercial tour operators to conduct tours in the Recreation Area. In 1994, there were 187,222 service days authorized in the Recreation Area and in 1995, there were 205,622 service days authorized, including 179,748 authorized at the Visitor Center. The following shows the increase in level of commercial use at the Visitor Center from 1992-1995:

**Table 3-8: Outfitter/Guide Tours to  
Mendenhall Glacier Visitor Center,  
1992 - 1995**

<b>YEAR</b>	<b>Authorized level of commercial use</b>
1992	126,360
1993	140,987
1994	161,326
1995	179,748

(source: Special Use Permit files, Juneau  
Ranger District)

For many tour operators, the Mendenhall Glacier is featured as a centerpiece in their adventure tourism packages, and is an important part of their business.

Since 1981, commercial tours have been authorized to operate in the Recreation Area. Special use permit fees paid for commercial use in the Recreation Area since 1981 have generated over \$659,673, which goes to the United States Treasury. Twenty-five percent of this total, or \$164,918, has been returned to the local community for schools and roads improvements. With recent changes to Forest Service authorities under which special use permit fees are collected, these fees may no longer be returned to local communities.

Since the early 1980's, over 1,739,063 people on commercial tours have visited the Recreation Area since that time. In 1995, estimated annual gross revenue from tours just to the Visitor Center totaled over \$4,594,950.

The following is a listing of commercial Special Use Permits issued for the Recreation Area in 1994 and 1995:

**Table 3-9: Approved Commercial Special Uses**

<b>Permit Holder</b>	<b>Area Type of Use</b>	<b>1994 Service Days</b>	<b>1995 Service Days</b>
Alaska Discovery	Mendenhall Lake & River Canoe and Kayak Trips	160	160
Alaska Native Tours	Visitor Center Bus Tours	0	5,000
Alaska Sightseeing Tours	Visitor Center Bus Tours	5,540	5,500
Alaska Travel Adventures	Mendenhall River River Float Trips	25,233	25,700
Alaska Travel Adventures	Visitor Center Bus Tours	0	11,400
Alaska Up Close	Visitor Center Photography Tours	20	25
Eagle Express Line	Visitor Center Bus Tours	200	0
Glacier Bay Lodge	Visitor Center Bus Tours	3,750	3,750
Karla Hart AK Rainforest Tours	West Glacier Trail Guided Hiking	14	14
Holland America (Grayline of Alaska)	Visitor Center Bus Tours	76,441	81,700
Gastineau Guiding	Visitor Center Bus Tours	0	1,000
Island Waterways	Visitor Center Bus Tours	0	1,000
Mendenhall Glacier Transport (MGT)	Visitor Center Bus Tours	24,681	24,681
Ptarmigan Ptransport	Visitor Center Bus Tours	5,743	0
Royal Highway Tours (Princess)	Visitor Center Bus Tours	44,250	45,000
Wright Tours	Visitor Center MiniVan Tours	692	692
<b>TOTAL</b>		<b>186,733</b>	<b>205,622</b>

In addition to authorized commercial use, some companies are illegally conducting tours without a special use permit. Efforts are currently under way to address illegal commercial use operations in the Recreation Area.

A number of companies or individuals have also expressed interest in providing new tours to the Recreation Area once the final decision is made on the 1996 Management Plan. Requests for special use permit applications show the following levels of interest in new commercial uses in the Recreation Area:

**Table 3-10: Requests for New Commercial Use In the Recreation Area**

# of Companies Interested	Area/Type of Use
5	Guided Hiking on all Rec Area Trails
8	Visitor Center Bus/Van Tours
5	Raft/Canoe/Kayak Tours
2	Tours to Skater's Cabin
2	Bike Tours
1	Horseback Riding Tours
1	Small Motorized Boat Tours
1	Tourist "Barge" to Face of Glacier
1	Gold Pan Tours
1	Photography Concession at Visitor Center

Commercial operators have also shown general interest in providing new concessions such as photography tours, icefield snow tractor tours, photography concessions, recreational equipment concessions (boats, bikes), food and beverage cart concessions, souvenir/T-shirt/gift cart concessions, and portrait concessions.

## K. Environmental Education

Because much of the Recreation Area was covered by the Mendenhall Glacier within the last 100 years, the area provides a unique opportunity for environmental education. The area is a living laboratory for the study of plant and animal succession and geology.

Most of the people that tour the Visitor Center receive various interpretive messages about glaciers, geology, plants, and wildlife. These messages are conveyed through interpretive signs, one-on-one contact with the Visitor Center staff, and viewing the "Magnificent Mendenhall" video shown in the Visitor Center. Other educational activities that are sponsored by the Visitor Center staff include guided nature walks on the Moraine Ecology Trail, salmon information guided walks, interpretive presentations at the Mendenhall Lake Campground, and "Kid's Day" programs on Saturday mornings where children are introduced to various natural history topics.

Because of its unique qualities, the Recreation Area is likely used by many local people for educating out-of-town family and friends. This informal education is probably associated with recreational activities such as hiking or fishing.

Local schools also take advantage of the environmental education opportunities the Recreation Area provides. Each year, during the week long "Sea Week" program, third graders from each of the Juneau schools tour the Visitor Center and surrounding area to learn about glaciers and plant and animal succession. The Visitor Center hosts approximately 500 third graders each year.

Because Mendenhall River Community School is located adjacent to the Recreation Area, they use it for educational as well as recreational purposes. All of the approximately 600 students visit the Recreation Area as many as four times during a school year as part of school sponsored field trips. Topics for these trips include aquatic biology, plant succession, and animal tracks to name just a few.

Other public, as well as private Juneau area schools use the Recreation Area for field trips, though because of travel costs they are not able to use it to the extent Mendenhall River Community School does.

## **L. Social/Human Environment**

The economies of most communities in Southeast Alaska depend almost exclusively on the Tongass National Forest to provide natural resources for uses such as fishing, tourism, recreation, timber harvesting, mining and subsistence uses. Maintaining the abundant natural resources found on the Tongass concern those who make their living here (USDA Forest Service, 1991b).

In addition to economic activity, the quality of people's lives is greatly enhanced by the physical environment associated with the Tongass. To many, Southeast Alaska is viewed as what America was like two hundred years ago. Alaska has always been known as a wild and magnificent place, a vast expanse of seemingly unlimited scenery and vast natural resources. People who live here and people who have never even seen Alaska think of it as "The Last Frontier." Many Southeast Alaskans want to keep that which makes their part of the world unique. At the same time, they want to continue maintaining their economic livelihood (USDA Forest Service, 1991b).

In Juneau, the State, City and Borough, and Federal agencies provide nearly half of the employment in the community. Juneau is home to State Legislators and their staff during the legislative session between January and May. Tourism is a significant contributor to the private sector economy during the summer months, with the Mendenhall Glacier a premiere attraction. Support services for logging and fish processing contribute to the economy. Two major mining projects are currently undergoing the permitting and development process. The Greens Creek Mine will resume operations in early 1997. Arts and crafts, retail trade, and service activities also contribute to the local economy (Alaska Department of Community and Regional Affairs, 1996).

U.S. Census data for Juneau in 1990 showed a median household income of \$47,924 and a median family income of \$54,088. Out of a potential work force of 19,563 people, 6,669 were employed in the private sector, 1,056 were self employed, 1,489 were employed in local government, 4,055 were employed in State government, and 1,193 were employed in the Federal government (Alaska State Department of Community and Regional Affairs, 1996).

The City and Borough of Juneau is comprised of three communities: Juneau, Auke Bay, and Douglas. In 1950, when the Recreation Area was first designated, 5,956 people lived in Juneau. During the last three decades, the population of Juneau has increased significantly. In 1960, Juneau had a population of 6,797. By 1990, the population had nearly quadrupled to 26,751 (USDA Forest Service, 1993), and in 1995, the population had grown to 29,755 (Alaska State Department of Community and Regional Affairs, 1996).

During the summer months, cruise ships now account for most of the summer tourists who visit Juneau. For many of the organized tour visitors, their trip is a first and probably only visit to Alaska. For many, the Mendenhall Glacier is one of the first glaciers many of them have seen. Although their age and physical profiles may vary, many of these visitors are over 55 years old, retired, and on a once-in-a-lifetime trip (USDA Forest Service, 1993).

Marketing studies by the Alaska Division of Tourism indicate that "scenery, forest, mountains, out-of-doors" and "wilderness, unspoiled, rugged" were the top interests appealing to potential visitors (USDA Forest Service, 1991b).

The following information was obtained from a McDowell Group Executive Summary of Southeast Alaska Visitor Profiles which was prepared for the Southeast Alaska Tourism Council in October, 1994. Approximately 66% of all of the visitors to Southeast Alaska visit the Mendenhall Glacier (McDowell Group, 1994). Since a majority of visitors to Southeast Alaska visit the Mendenhall Glacier, the assumption can be made that the information provided below would apply to most Southeast visitors visiting the Recreation Area in general.

Southeast Alaska visitors are well educated. More than half of all regional visitors have at least a college degree.

Visitors to Southeast Alaska are more likely to be female than male. Visitors statewide are more likely to be male.

Southeast Alaska visitors are more likely to be retired.

Vacation and pleasure are the reasons most visitors travel to this area (92% of all visitors to Southeast Alaska).

The primary entry mode is cruise ship, followed by domestic air.

Approximately 75% of all visitors to Southeast Alaska travel on a package tour or cruise.

The average visitor to Southeast is significantly older than statewide visitors. Approximately 36% are 65 years or older.

## **M. Subsistence**

A variety of subsistence resources are available within the Recreation Area. These include various species of fish, birds, berries, as well as other plants. At this time, there is no known subsistence harvest of these resources from the Recreation Area. There are currently no subsistence hunting regulations that address taking game from the mainland near Juneau. Under Federal Subsistence Management regulation, Juneau does not qualify as a rural community and therefore, its residents do not qualify as subsistence hunters. This means that residents of Juneau are not allowed to participate in federally regulated subsistence hunting activities.

# **Chapter 4**

## **Environmental Consequences**

### **A. Introduction**

This chapter provides the analytical basis for comparison of the project alternatives (Chapter 2). It discusses the anticipated environmental effects associated with implementation of the action alternatives in comparison to Alternative 1 - No Action.

### **B. Issue 1 - Motorized Recreational Vehicle Use**

This issue reflects public concern for safe use of trails by non-motorized recreationists as well as concern by recreationists who use motorized vehicles that they be allowed to continue these uses. ORV generated noise and resource damage are also components of this issue.

During public scoping on the proposed changes to the 1975 Management Plan (Alternative 2 - Proposed Action), most comments were related to ORV use in the Recreation Area. Most of these comments favored elimination of ORV's within the Recreation Area. During public scoping on the DEIS, most response letters opposed ORV use in the Recreation Area (see FEIS Appendix A - Response to Public Comments).

There have been 101 documented incidents reported to law enforcement agencies regarding ORV use in the Recreation Area from 1990-1995 (USDA Forest Service, 1995i) and 32 incidents from March 1995 - March 1996 (USDA Forest Service, 1996e). The majority of these incidents involved ORV users riding in closed areas or riding illegally through residential areas. A number of incidents of persons having to jump off the trail to avoid being struck by ORV's as well as some ORV users "dumping" their machines to avoid hitting hikers were also reported during public scoping and at the ORV workshop.

During public scoping on the proposed action, there were only a few comments discussing motorized model airplane use and motorized boat use.

### **Common to All Alternatives**

#### **Law Enforcement and Illegal ORV Use**

Forest Service efforts to reduce illegal use have been ongoing for over twenty years. Efforts have included large boulders, rock barriers and berms placed along the existing ORV closure boundary, signs and maps designating ORV open and closed areas repeatedly placed both along the ORV area boundary and at all ORV trailheads into the Recreation Area, a Dredge Lake Trail Ranger program, and Forest Service law enforcement patrols, with ORV user contacts made and citations issued for illegal use. None of these efforts have been able to reduce illegal ORV use.

Because of limited resources, it is expected that the level of law enforcement personnel available will remain at a level similar to what it has been in years past.

Illegal ORV use would continue because there is a limited amount of ORV area available and because of the difficulty of enforcing boundaries without a distinct geographic barrier.

The effects of illegal ORV use in closed areas would continue for all alternatives and is described in Chapter 3 - Affected Environment, ORV Use Impacts, and Illegal ORV Use. These effects are common to all alternatives and, depending on level of illegal use, would negatively effect the recreation experience of some users and may preclude their use of the Recreation Area. Reported incidents of ORV's illegally accessing the Recreation Area along residential streets would also likely continue. This would result in continuing conflicts between ORV users and adjacent residents. The level of these effects would vary by alternative based on ability to enforce due to presence of recognizable geographic barriers, ORV access points, and miles/acres/types of areas open to ORV use.

#### **ORV Impacts**

Comparing old aerial photographs with the present condition of this area has shown that ORV use has caused damage to vegetation in the Recreation Area. Because of this vegetation damage, the effects of ORV use will be contingent on the number of ORV trails and the size of ORV areas authorized for each alternative. For all alternatives, the greater the miles of trails and acres of open area, the greater the impact to vegetation.

#### **Boat Launch Access**

Under all alternatives there is no developed boat launch with vehicle access. This will affect motorized boat use on Mendenhall Lake and Mendenhall River by limiting access. As this is the current situation, motorized boating opportunities for alternatives that allow motorized boat use will likely stay the same as the existing condition, except for motorized boats that travel up river to access the lake.

#### **Mendenhall Lake**

For all Alternatives, access to the face of the glacier by motorized and non-motorized users would not be allowed due to the dangers of calving ice. This would diminish the recreation experience for some users who want a closer view of the glacier.

### **Alternative 1 - No Action**

#### **ORV's - Summer Use**

This alternative would allow ORV use as currently outlined in the existing 1975 Mendenhall Glacier Recreation Area Management Plan and 1985 Chatham Area ORV Plan. ORV's would be allowed in the Dredge Lakes Unit of the Recreation Area, with approximately 207 acres of area (approximately 3.6% of the Recreation Area) and 7.8 miles of trails available for ORV riding (approximately 33% of the total trail miles within the Recreation Area).

ORV use would remain at the same level or increase slightly. Conflicts between motorized and non-motorized users would continue near existing levels. This would result in a diminished recreation experience for both user groups. This could also result in continued tension and harrassment between some users as was indicated in public comments and discussed at the ORV workshop (i.e., ORV's "circling" hikers on the beach, hikers throwing rocks at ORV's on trails, verbal harrassment, vandalism of private property).

Law enforcement would be difficult because the ORV boundary would be an administrative line in the middle of the Dredge Lakes area. During the past twenty years, attempts by the Forest Service to define this boundary and contain ORV travel within this designated area have not been effective. This effect would continue under this alternative.

Near misses between motorized and non-motorized visitors using the Recreation Area would continue. This could result in serious accidents involving non-motorized users and ORV users. Some motorized users would most likely continue to operate their vehicles at moderate to high rates of



speed and in a reckless manner on winding trails. As a result, safety concerns expressed by non-motorized users would continue at near or existing levels.

Some families no longer use the Dredge Lakes Unit because of the potential of a collision with an ORV. This effect would continue under this alternative.

Some non-motorized users have had their recreation experience impacted by ORV noise and presence. They feel their solitude and enjoyment of the area was diminished by this type of activity. This effect would continue under this alternative.

A number of teachers frequently use the Recreation Area for field trips to study the glacial landscape. They are concerned about allowing ORV use and students in the same area. The education experience would be degraded due to noise, interruptions, and unsafe situations. Under this alternative, this would continue.

For ORV users, this alternative would provide the greatest acreage and mileage for ORV use of all alternatives. This would result in providing the most ORV opportunities, including an open ORV riding area, trails, and gravel pit. For some ORV users, use of this type of open area would enhance their recreation experience. The Dredge Lake Unit in the Recreation Area would also be one of the few areas where people could legally operate ORV's. This could attract a greater number of motorized users and enhance the appeal of the Recreation Area for these users.

Under this alternative, the Recreation Area would continue to provide motorized recreational opportunities for young people, as well as providing an easily accessible area for many youth to recreate using ORV's. This could also serve to attract other youth to this type of recreational experience.

Informal ORV training for children could continue under this alternative, enhancing some ORV users' recreation experience. ORV use and training would occur in the same areas and, depending on the number of new riders, could take place at higher levels than what has occurred in the past. This use would occur year-round but would be highest during the summer months.

Because the designated ORV area within the Recreation Area is not meeting ORV user needs, illegal ORV use would likely continue in closed areas at near or existing levels. This would result in continued ORV use and impacts (as described earlier in this chapter and in Chapter 3) for approximately 545 acres (approximately 9.4% of the Recreation Area) which is currently receiving illegal ORV use (see Map 16). Level of impact would be the same as the existing condition unless education and law enforcement emphasis decreased illegal ORV activities, resulting in fewer impacts and reduced conflicts between the user groups.

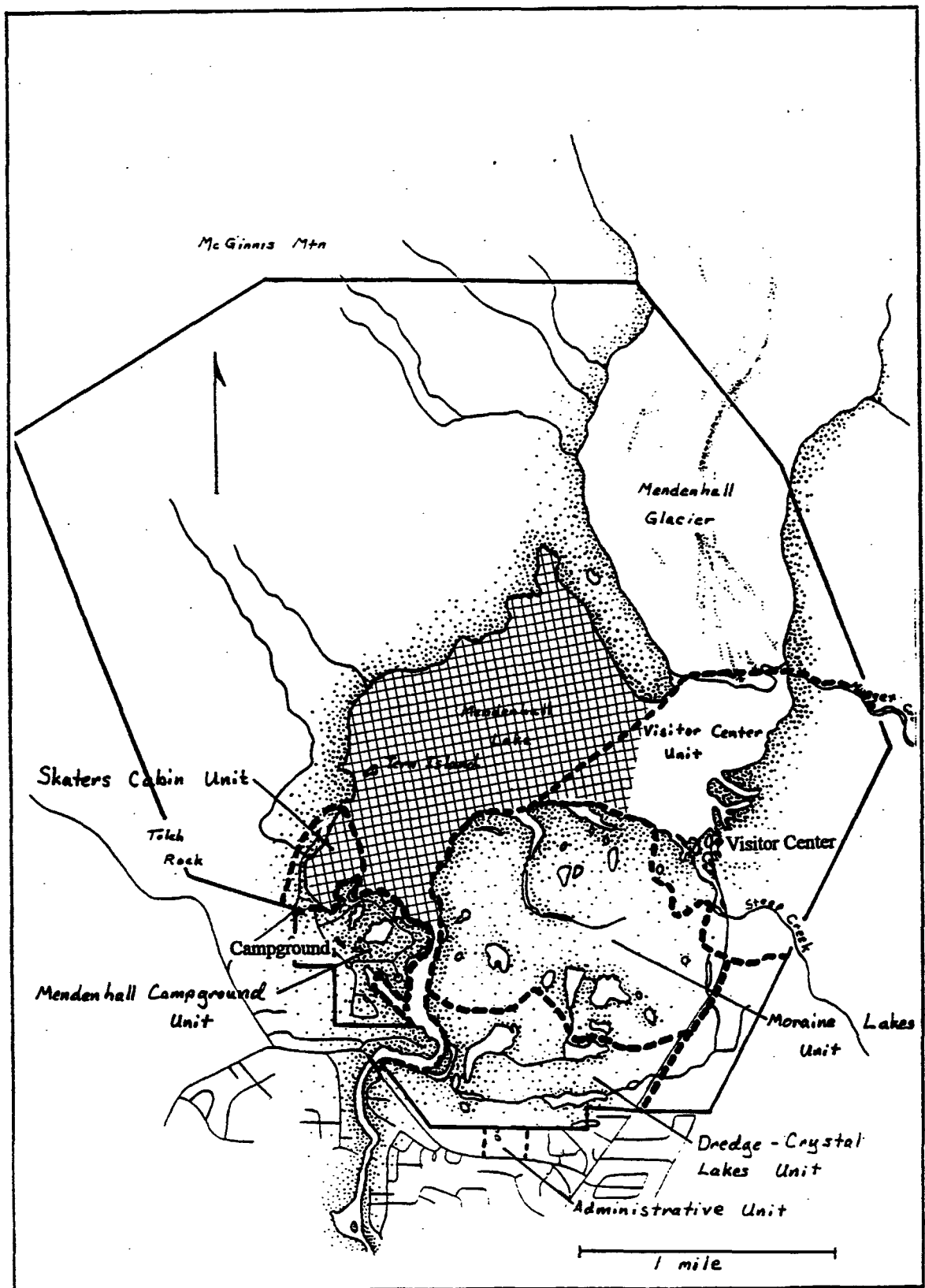
Vegetation loss from pioneer trails would continue near existing levels. These trails are being made by ORV users traveling off of the designated trails. These trails leave the designated trail system approximately every 0.1 miles and are causing damage to the vegetation through breakage of branches and exposure of roots caused by ORV's hitting and driving over the vegetation. This kills some plants and results in changes in vegetation composition, vegetation loss, and the potential for increased soil erosion. This effect would continue.

Under this alternative, dispersed ORV use off trails in vegetated areas could create routes that would channel water, increase soil erosion, and damage plant and animal habitat. ORV recreation use in riparian areas could also increase sediment and otherwise reduce water quality in ponds, lakes and streams.

### **ORV's and Snowmobiles - Winter Use**

Winter ORV and snowmobile use of the Dredge Lakes Unit and on the Mendenhall Lake Campground road would continue. Visitors would encounter ORV noise and visual presence at or near existing levels. Conflicts between snowmobiles, ORV's, and skiers would continue at or near existing levels.

**Map 17. Mendenhall Lake area open to ORV and snowmobile use in winter for all alternatives, except Alternative 5**



### **Other Motorized Uses**

Model airplane use would continue to occur at existing levels. Vegetation growth would eliminate some landing and take-off areas. Model airplane users would be able to access the area by ORVs with trailers. This would aid some model airplane users access to the area, as planes and associated equipment sometimes weigh over 100 pounds and are difficult to carry on foot. Noise would continue to be of concern to some recreation users and adjacent homeowners.

Motorized boat use on the west side of Mendenhall Lake would continue to occur on an intermittent basis, however this use would be limited due to lack of a vehicle access to a boat launch. Intermittent motorized boat travel upriver would continue. Jet boats, airboats, hovercraft, jet skis, or other motorized boats could interfere with rafters, canoers, and kayakers who travel Mendenhall Lake and down Mendenhall River. Recreation experience would be affected by noise and visual presence of these watercraft. Large wakes from motorized boats could also affect the safety of non-motorized boaters.

### **Alternative 2 - Proposed Action**

#### **ORV's - Summer Use**

Under this alternative, ORV use would be prohibited in the Recreation Area in the summer.

For non-motorized users, this alternative would address safety concerns and interruption of their solitude and recreation experience caused by ORV noise and presence. There would be no encounters with ORV's recreating on trails in the Recreation Area. Non-motorized users would experience a greater sense of solitude and safety on trails. Some people would return with their families to recreate in the area, providing more recreation opportunities. Harassment between user groups would be diminished. Near misses would be eliminated. This would result in greater satisfaction level for non-motorized users and could result in a greater number of non-motorized users visiting this area.

Eliminating ORV use within the Dredge Lakes Unit would reduce the number of ORV incidents. Illegal ORV use, including illegally accessing the area along residential roads, would decrease, resulting in fewer conflicts with non-motorized users and adjacent residents along residential roads. Except for Alternative 5, this alternative would have the greatest positive impact on reducing motorized vs. non-motorized user conflicts and safety concerns.

Teachers would be able to conduct educational field trips with greater safety because they would not encounter ORV's using the same trails or areas as their students. There would be less disruption of the students' learning experience from ORV noise and presence.

For motorized users, this alternative would not address ORV users concern for keeping an area open for ORV use in the Recreation Area. Out of the approximately 400 acres along the Juneau road system that is accessible to ORV's, this alternative would reduce summer ORV recreational use opportunities in the Juneau area by 207 acres, or approximately 50%. The Dredge Lake ORV area is one of the most easily accessible areas and receives the highest amount of use by ORV's in Juneau. This easily accessible ORV area would be eliminated under this alternative.

Closure of the Dredge Lakes Unit to ORV's would reduce the area available to ORVs in Juneau by approximately 207 acres and 7.8 miles of trail (approximately 33% of the total miles of trail within the Recreation Area). This would negatively affect motorized users' experience by limiting ORV opportunities. Locations for informal ORV training would be limited to several areas of public land (such as the State land near Eagle River) and to some private land. For some ORV users, this alternative would limit easily accessible recreation areas for youth who want to experience a motorized recreation activity. This would result in less opportunities for these users and negatively affect their recreation experience. Some users would not be able to train their children on use of ORVs because areas for

these activities would be limited. This would also negatively impact their recreation experience. For some ORV users who are disabled and who use ORV's to access more undeveloped areas of the Recreation Area, this will reduce their recreation opportunity.

ORV use could still occur on some Alaska State lands. The 150 acre gravel pit located between Eagle River and the Eagle Beach picnic area and adjoining tidal area would likely receive greater ORV summer use. These areas could provide new opportunities for some ORV users.

Some illegal ORV use would still occur. This use would be less than current illegal use levels because it would be easier to enforce an area closure over a large geographic unit than an open/closed area with few geographic boundaries or barriers.

Prohibiting ORV use in the Recreation Area could also result in greater illegal use on other National Forest System lands (i.e., Eagle Beach), City and Borough of Juneau lands, or State lands closed to ORV use. This could adversely impact those resources as well as visitor experience in those areas.

Under this alternative, damage to vegetation caused by ORV's illegally pioneering new trails from designated routes would be minimal. The trails and areas not maintained would begin to revegetate, which would decrease soil erosion. Wetlands and fish spawning areas would not be impacted by ORV use, resulting in reduced impacts to fish and wildlife species.

Except for Alternative 5, this alternative provides the opportunity for the greatest rehabilitation and improvement to areas where ORV resource damage has occurred.

#### **ORV's and Snowmobiles - Winter Use**

Winter ORV and snowmobile use on Mendenhall Lake when frozen would continue and would provide some opportunities for winter ORV and snowmobile recreation use.

Because winter ORV and snowmobile use would be prohibited in the Dredge Lakes Unit, opportunities overall for winter ORV use in Juneau would be reduced. Of the total acreage available for winter ORV and snowmobile use along the Juneau road system (5,280 acres), under this alternative there would be a loss of 4% (207 acres). Because of the local geography and steep terrain, easily accessible winter motorized use areas are limited. As the Dredge Lakes Unit is one of the more easily accessible areas, elimination of ORV and snowmobile use in this area would negatively affect those motorized users who want an area easily accessible from the Juneau road system.

Under this alternative, ORV's and snowmobiles would not be allowed on the 2.5 miles of road in the Mendenhall Lake Campground during the winter. This would decrease available winter ORV and snowmobile trails by 8% along the Juneau road system, reducing recreation opportunities. Conflicts between motorized and non-motorized winter users in the campground would be eliminated. This would result in greater satisfaction for cross-country skiers and snowshoers. Because of noise and visual presence, some conflicts would still occur between ORV's, snowmobiles and cross-country skiers on Mendenhall Lake. This would result in degradation of some non-motorized users' experience. For winter ORV and snowmobile users, allowing ORV use on the lake would still provide an easily accessible ORV area in the winter along the Juneau road system.

#### **Other Motorized Uses**

Under this alternative, model airplane use would still occur. Effects would be similar to Alternative 1 - No Action, except that model airplane users would be required to carry their airplanes and associated materials in by foot or bicycle because of the ORV closure. This may limit some use of the area by model airplane users as planes and gear sometimes weigh over 100 pounds and are difficult to carry. This could reduce recreation opportunities for some users, and lead to a diminished recreation experience.

Effects on motorized boat use would be the same as Alternative 1 - No Action.

### **Alternative 3**

#### **ORV's - Summer Use**

This alternative would allow ORV use only on approximately 3.13 miles of designated trails (approximately 9% of the total trail miles within the Recreation Area) and in the 17.5 acre gravel pit area in the Dredge Lake Unit. Within the Recreation Area, there would be a reduction of 189.5 acres of ORV use area and a decrease of approximately 4.67 miles of trail for ORV use from the existing condition.

Under this alternative, ORV use levels would most likely be similar to or slightly higher than existing use levels. Non-motorized use levels may increase due to the separation of motorized and non-motorized users, though some non-motorized users' recreation experience would still be diminished due to noise and visual presence when near the ORV area. There would still be some conflicts between pedestrian and motorized users but these conflicts would be less than in Alternative 1 - No Action because of the separation of users, and greater than in Alternative 2 - Proposed Action because there would still be ORV use and presence in the Recreation Area.

A majority of non-motorized recreation use occurs near Moose Lake and Dredge Lake and along the trails accessing them. This alternative would prohibit ORV use on 1.5 miles of trails near the Back Loop Bridge Trailhead and Dredge Lake Road in order to separate motorized and non-motorized user groups. For non-motorized users, this would address safety concerns by creating an 'ORV-free' corridor from the Back Loop Bridge and Dredge Lakes access to the interior of the Dredge Lakes Unit, and would reduce encounters between motorized and non-motorized users in this area. Prohibiting ORV use on these trails would also address concerns for separating students from motorized use areas. Field trips and educational visits could then be conducted without user conflicts regarding safety concerns, noise, or interrupted educational experiences.

Under this alternative two new trailheads would be developed for ORV access, and the Backloop Bridge Trailhead and Dredge Lake Road Trailhead would no longer be available for ORV use. This would allow ORV users to enter the Dredge Lakes Unit from new ORV trailheads that would be further from residential areas and less congested than the Backloop Bridge and Dredge Lake Trailheads. This would result in less ORV traffic and less noise at these trailheads, reducing conflicts with adjacent residents along Dredge Lake Road and near Back Loop Bridge. These new ORV trailheads would also allow for separation of user groups so that non-motorized and motorized users would not access the Recreation Area from the same trailheads or be using the same trails.

ORV trails and the gravel pit area would be designated and signed so that non-motorized users would be aware of the ORV area and could avoid using these trails, though non-motorized user could still use this area if they chose. This would reduce encounters on the trails, reducing near misses and potential for accidents described in Alternative 1 - No Action. Separation of user groups could also enhance the recreation experience for both motorized and non-motorized users. With a designated ORV trail system, there would be more opportunities for experiences of solitude and quiet under this alternative than for Alternative 1 - No Action, but less than Alternative 2 - Proposed Action which prohibits most ORV use, because visitors would occasionally hear and see ORV's.

Under this alternative, the designated ORV trail system would be allowed north of Crystal Lake. Illegal ORV use does occur on pioneer trails near this area, though is limited due to thick vegetation and trees. A new designated ORV trail in this area could diminish the experience of non-motorized users who desire more solitude in this area. ORV noise may also be more apparent to visitors at the Visitor Center due to the closer proximity of ORV use. This could negatively impact some visitors' recreation experience.

For motorized users, the total ORV trail mileage would decrease from Alternative 1 - No Action. Motorized users would also be required to stay on designated trails. For some ORV users, this would diminish their recreation experience because the Dredge Lakes Unit is currently used as an open ORV riding and ORV trail area, and some users prefer an open riding area.

While this alternative reduces overall acreage available for ORV use, it would also provide expanded recreation opportunities by providing new use in previously undeveloped or inaccessible areas. Currently, ORV use is not allowed north of Crystal Lake. Under this alternative, a new designated ORV trail would be constructed and ORV use would be allowed north of Crystal Lake on a new trail system. For some ORV users, the opportunity to travel on a diverse trail system would enhance their experience.

This alternative would provide a quality ORV recreation experience on a diverse trail system. This would allow youth opportunities to participate in motorized recreational activities. The 17.5 acre open area (the gravel pit) would continue to provide opportunities for informal ORV training, well as practice ORV riding skills (see Map 6). This would enhance motorized users recreation experience.

Designated ORV trails could enhance motorized users' experience by reducing the numbers of non-motorized users in a motorized use area. Some ORV users have reported "dumping" their machines when encountering dogs off-leash on the trail or coming around a corner and finding people in the middle of the trail. This alternative could reduce these types of encounters and would create a safer motorized recreation experience.

This alternative would require an annual ORV permit and proof of having attended an ORV safety course for all ORV users. This would result in an information system that could collect ORV use data as well as provide education to ORV users regarding designated ORV use areas and trails, area closures, rules and regulations of riding on National Forest, and ORV rider etiquette. This education emphasis could reduce motorized and non-motorized user conflicts, enhancing both motorized and non-motorized users' recreation experience, as well as reducing the need for law enforcement effort.

Under this alternative, illegal use would still occur. Effects could be similar to but less than Alternative 1 - No Action, because even though there would be increased emphasis on education of ORV users through the permit system, some users would not want to be restricted to a designated trail, and would travel off the designated ORV trail system and away from the designated ORV area. Some ORV users would also continue illegal ORV use in closed areas because the area would not meet ORV user demand.

Under this alternative, because there are no easily defined geographic boundaries between the designated ORV open areas and trails and the closed areas and trails, it would be difficult to enforce the closure areas. Past experience in closing an area where there is only an administrative line and/or trail and no distinct geographic boundary indicates that it would be extremely difficult to effectively enforce ORV use regulations and eliminate illegal ORV use.

Damage to vegetation in the designated ORV area would be less than Alternative 1 - No Action but greater than Alternative 2 - Proposed Action, because ORV use would be limited to an existing trail system and a smaller open ORV area (gravel pit). Under this alternative, damage to vegetation in the designated ORV area from new pioneer trails would be reduced. This would allow damaged areas to recover and return to their natural state. This would reduce impacts of vegetation damage and loss.

Some damage to vegetation would occur with the one mile of new trail constructed because vegetation removal would occur during this construction. ORV use on the new trail would also lead to some tree roots being exposed due to soil loss. This could result in loss of some trees adjacent to the new ORV trail. Brushing and clearing of the existing ORV trails would also result in some vegetation damage and loss.

Existing disturbed areas that would be closed to ORV use under this alternative would revegetate. In these areas, the effects of ORV use as described in the Common to All Alternatives Section of this Chapter would be less than currently occurs. The pioneer trails made by ORV's would become overgrown and return to a natural state.

### **ORV's and Snowmobiles - Winter Use**

Winter ORV and snowmobile use would be allowed on the designated ORV trail system and in the gravel pit area in the Dredge Lake Unit when snow cover is twelve inches or more. This designated winter ORV and snowmobile trail system could enhance some motorized users experience because there would be a new designated trail system to ride on during the winter. Under this alternative there would also less winter ORV and snowmobile recreation opportunities than Alternative 1 - No Action, because there would be 189.5 acres less than the existing condition open for winter ORV and snowmobile use. Of the total acreage available for winter ORV and snowmobile use along the Juneau road system (5,280 acres), this would be a loss of 3.5% (189.5 acres).

For some non-motorized users, effects of this winter ORV and snowmobile use in Dredge Lakes would be similar to but less than Alternative 1 - No Action, which allows ORV's and snowmobile use in the Dredge Lake Unit. Effects would be less than Alternative 1 - No Action, because there would be a separation of user groups, reducing encounters between motorized and non-motorized users, and because there would be a reduced open area (17.5 acres) for winter ORV and snowmobile use.

Effects of winter ORV and snowmobile use at Mendenhall Lake Campground and on Mendenhall Lake would be the same as Alternative 2 - Proposed Action.

### **Other Motorized Uses**

Effects on model airplane use would be the same as Alternative 1 - No Action.

Effects on motorized boat use on Mendenhall Lake and Mendenhall River would be similar to Alternative 1 - No Action, except that airboats, jetboats, jetskis and hovercraft would not be allowed and motorized boats would be required to follow a "no wake" rule. This would reduce some motorized recreational boating opportunities and diminish some users' recreation experience. Because there is no developed boat access, this type of use has been rare on Mendenhall Lake and River, and effects would be minimal on existing use. Restrictions on motorized boat use would enhance some non-motorized as well as motorized boaters' recreation experience, as visual presence and noise of large motorized boats would be not be present, and there would be a greater sense of solitude and quiet.

While there would not be a developed boat launch, some boat users could find increased recreation opportunities, as they would be allowed vehicle access to offload boats behind the gate and "reserved site" now used by a special use permit holder. This recreational boating access could lead to increased use of the lake and river. This would increase recreational boating opportunities in the Juneau area. Some visitors would experience a loss of solitude from increased use on the lake and river, crowding and congestion at the West Glacier Trailhead, and conflicts with commercial users. There could also be increased conflicts between motorized and non-motorized boat users on Mendenhall Lake, which could negatively affect visitor experience.

## **Alternative 4**

### **ORV's - Summer Use**

This alternative would allow ORV use in a 144 acre ORV riding area, including approximately 2.25 miles of existing trails (see Map 8). This area would be signed and designated as an ORV area similar to Alternative 3. This alternative would result in a decrease of approximately 5.6 miles of existing trail available for ORV use and a decrease of 63 acres of ORV area. Access to these trails would be

increased by the development of the same ORV trailheads as Alternative 3, with the Backloop Bridge Trailhead no longer be available for ORV access.

Under this alternative, effects on ORV use levels and non-motorized use levels would be the same as Alternative 3.

Effects on non-motorized users experience would be similar to but less than Alternative 1 - No Action, because there would still be an open riding area, but it would be smaller in size than Alternative 1 - No Action and ORV use would be prohibited on 1.5 miles of trails near the Back Loop Bridge and Dredge Lake Road, creating non-motorized access trails into the Recreation Area.

Some non-motorized users would experience greater satisfaction and solitude north of Crystal Lake because there would be no new ORV trail in that area (as in Alternative 3). Because the 144 acre ORV area is located within the existing ORV use area, visitors at the Visitor Center will also experience the same ORV noise and presence as Alternative 1 - No Action.

Effects of new ORV trailheads would be the same as Alternative 3.

Effects of separation of user groups would be the same as Alternative 3.

Effects on student groups and education experience would be the same as Alternative 3.

Illegal use would still occur. Effects could be similar to but less than Alternative 1 - No Action, because even though there is an increased education emphasis through the ORV permit system, lack of distinct geographic boundaries between the open and closed ORV areas would make enforcement difficult. Some ORV users would also continue illegal ORV use in closed areas because the area would not meet ORV user demand.

Effects on motorized users would be similar to Alternative 1 - No Action, which allows ORV users an open ORV area. Under this alternative, the ORV area is 63 acres less than the existing condition. For some ORV users this would diminish their recreation experience because the current area is not meeting ORV user demand. For other ORV users, this alternative would provide a satisfactory motorized recreation experience because they would be able to operate ORV's without the restriction of staying on designated trails which was required under Alternative 3.

Effects of ORV's being able to use this area as an informal ORV training area would be similar to Alternative 1 - No Action, because of the open area to ride in, and greater than Alternative 3, because ORV's would not be restricted to the gravel pit area or designated trail system. This would enhance some user's experience by offering similar levels of recreation opportunity as Alternative 1 - No Action. Effects of providing for young ORV riders would be the same as Alternative 1 - No Action, because there would be an open riding area, but less than Alternative 3 because there would not be a diverse trail system developed with degrees of challenge and skill level.

This alternative would require an annual ORV permit and proof of having attended an ORV safety course as well. Effects would be the same as Alternative 3.

Damage to vegetation would occur because ORV use would be allowed in an open riding area. Effects could be less than Alternative 1 - No Action but greater than Alternative 2 - Proposed Action, because ORV use would be limited to a smaller open ORV area (144 acres). Damage to vegetation from new pioneer trails would likely occur, but would be less than Alternative 1 - No Action, because of the smaller ORV open area. Vegetation damage could be reduced if motorized users stay on designated trails and in the gravel pit area. This would allow currently damaged areas to recover and return to their natural state, reducing impacts of vegetation damage and loss. If new pioneer trails continue to be created at near or existing levels, effects could be the same as Alternative 1 - No Action.



Damage to wetland and riparian areas and effects on fish and wildlife would be similar to Alternative 1 - No Action, because ORV use in the open riding area would still occur.

### **ORV's and Snowmobiles - Winter Use**

Effects of winter ORV and snowmobile use would be similar to Alternative 1 - No Action, except that under this alternative, there would be 144 acres of open winter ORV and snowmobile riding area, instead of 207 acres under Alternative 1 - No Action. This alternative would provide more winter ORV and snowmobile open riding areas easily accessed by the Juneau road system than any other alternatives except for Alternative 1 - No Action. This could enhance the experience of those motorized users who desire a winter ORV area that is more easily accessible.

Effects of winter ORV and snowmobile use at Mendenhall Lake Campground and on Mendenhall Lake would be the same as Alternative 2 - Proposed Action.

### **Other Motorized Uses**

Effects on model airplane users would be the same as Alternative 1 - No Action.

Motorized boat use on Mendenhall Lake and Mendenhall River would not be allowed. This would reduce some motorized recreational boating opportunities, but because this type of use has been rare on Mendenhall Lake and River, effects on existing users would be very minimal. And because there is no developed boat access on Mendenhall Lake, this type of use in the future would likely be intermittent, except for larger motorized boats that can travel up river. Restrictions on motorized boat use would enhance non-motorized recreation because visual presence and noise of motorized boats would be not be present, and there would be a greater sense of solitude.

## **Alternative 5**

### **ORV's - Summer Use**

This alternative would close the Recreation Area to all motorized recreational use. The effects of this alternative would be the same as Alternative 2 - Proposed Action.

### **ORV's and Snowmobiles - Winter Use**

In addition to closing the Dredge Lakes Unit to winter ORV and snowmobile use, this alternative prohibits winter ORV and snowmobile use on Mendenhall Lake when frozen.

Effects are greater than Alternative 2 - Proposed Action, because of the additional loss of an easily accessible winter ORV and snowmobile area along the Juneau road system. Because estimates of frozen lake surface area on the west side of Mendenhall Lake can vary, depending on winter conditions, this alternative represents a potential loss of approximately 200 acres that is currently available for ORV and snowmobile use. This will negatively affect some winter ORV and snowmobile users' recreation experience by reducing motorized winter use areas along the Juneau road system that are easily accessible.

For non-motorized users, conflicts between motorized and non-motorized users will be eliminated on Mendenhall Lake and they will experience a greater sense of solitude and a higher quality recreation experience. For some non-motorized users, this will also reduce safety concerns regarding potential encounters between motorized and non-motorized users on Mendenhall Lake.

### **Other Motorized Uses**

Under this alternative, model airplane use would be eliminated. Noise concerns to other recreationists and adjacent homeowners would be eliminated. Users in the Recreation Area would experience greater levels of solitude over the existing condition.

Model airplane users would lose one of the few areas in Juneau available for model airplane flying, resulting in fewer areas along the Juneau road system where model airplane users could recreate. Plant succession, however, is also rapidly reclaiming much of the current area in the Dredge Lakes Unit available for model airplane flying, and this may eventually eliminate opportunities for this type of use (except for model airplane use on the lake and river).

Effects on motorized boat use would be the same as Alternative 4.

## **Alternative 6**

### **ORV's - Summer Use**

Under this alternative, ORV use is the same as Alternative 2 - Proposed Action, and effects would be the same.

### **ORV's and Snowmobiles - Winter Use**

ORV and snowmobile use would be the same as Alternative 2 - Proposed Action, with the same effects.

### **Other Motorized Uses**

Under this alternative, model airplane use is the same as Alternative 2 - Proposed Action. Effects would be the same.

Motorized boat use is the same as Alternative 4. Effects would be the same as Alternative 4.

## **C. Issue 2 - Firearm Use**

This issue reflects public concern for the safety of people recreating in an area where firearms are being discharged, as well as concerns for continuing opportunities for use of firearms during hunting season.

### **Common to All Alternatives**

The most serious safety concern dealing with firearms is their illegal use in the Recreation Area. These uses include use of firearms outside the authorized boundaries, the use of firearms for non-hunting purposes, and the use of rifles near residential areas. These types of activities have been common in the past. Safety problems exist when firearms are discharged adjacent to residential areas and when rifles are used for target practice or are shot over and into the ponds. From March 1990 through March 1995, nineteen incidents involving illegal use of firearms were reported. These illegal uses can be policed through laws that prohibit vandalism, taking game out of season, and reckless behavior. Even though these types of activities would not be allowed in any of the alternatives, it would likely take more enforcement effort than has been available in past years to eliminate the number of incidents.

### **Alternative 1 - No Action**

With the current state hunting restriction and the city shooting prohibition, approximately 58 acres are available for duck and rabbit hunting with shotguns. This area could accommodate one group of duck hunters if they were hunting over decoys on the north end of Moraine Lake. Rabbit hunters could hunt in this area but it would be difficult to know where the legal hunting and shooting boundaries are. Currently, most hunters do not abide by the State and City restrictions and hunt throughout the area between Mendenhall Lake and Back Loop Road. Approximately 740 acres on the side of McGinnis Mountain are also open for hunting.

In this alternative, grouse and ptarmigan hunting on McGinnis Mountain is restricted to shotguns. Blue grouse and ptarmigan can be hunted in the timber as well as in the alpine areas of McGinnis Mountain. Outside of the 0.25 mile no hunting area around Mendenhall Lake, the side of McGinnis Mountain does not have a trail system. For this reason there would be little chance of a person accidentally passing through a hunter's line of fire.

Under this alternative, some of the public would continue to be concerned for the safety of people recreating in an area where firearms are being discharged.

### **Alternative 2 - Proposed Action**

This alternative would prohibit the use of all firearms within the Recreation Area.

For hunters using shotguns, this alternative would result in a loss of approximately 740 acres of grouse and ptarmigan hunting area and 58 acres of duck and rabbit hunting area from the present management situation (Alternative 1 - No Action). Even though the number of acres lost to hunting may not be significant when compared to the large amount that is available in the Juneau area, a unique opportunity for young hunters gaining experience would be lost.

This alternative would result in the reduction of safety concerns dealing with legal use of firearms within the Recreation Area. Safety concerns dealing with illegal use of firearms would be the same as for Alternative 1 - No Action. Illegal use of firearms in the Recreation Area may be reduced as some people may be less likely to bring firearms into the area if they know hunting is not allowed. Enforcement would also be easiest of all alternatives, since any discharge would be illegal.

### **Alternative 3**

This alternative would allow use of shotguns for hunting waterfowl and rabbits within the Dredge Lakes Unit. It would also allow the use of shotguns and rim-fire .22 caliber rifles for grouse and ptarmigan hunting on McGinnis Mountain.

The Dredge Lakes Unit, as described in this document, is a combination of the Dredge Lake Unit and the Crystal/Moraine Lakes Unit as described in the 1975 Management Plan. Even though this unit is now larger, the hunting opportunities for waterfowl and rabbits would not increase due to the city and state hunting and firearm discharge prohibitions. There would still be 58 acres available for shotgun hunting for waterfowl and rabbits.

The number of acres available to hunt grouse and ptarmigan would be the same in this alternative as Alternative 1 - No Action (740 acres). The opportunities to hunt grouse would increase because this alternative would also allow .22 caliber rim-fire rifles to be used on McGinnis Mountain. A common method of hunting spring blue grouse is to locate displaying male birds, usually high in a spruce tree, and shoot them with a .22 caliber rifle. Most hunters prefer to use a rifle over a shotgun for this type of hunting.

The safety concerns regarding firearm use while hunting waterfowl and rabbits would be the same in this alternative as in Alternative 1 - No Action. The safety concerns for grouse and ptarmigan hunting on McGinnis Mountain would be the same as in Alternative 1 - No Action except for allowing the additional use of .22 caliber rim-fire rifles. A bullet from a rim-fire .22 caliber rifle can travel up to one mile. There are no residential areas within one mile of the area that people would hunt for grouse and ptarmigan. The West Glacier Trailhead, Skater's Cabin, and the road along the west shore of the lake are within this distance. Because shooting grouse with a rifle usually results in a high angle shot, the potential for a person to be injured by a bullet is extremely small. Safety concerns related to illegal firearm use would be the same as in Alternative 1 - No Action.

## **Alternative 4**

This alternative would prohibit the use of firearms in all units except McGinnis Mountain. This unit would be open to the use of shotguns and .22 caliber rim-fire rifles.

This alternative would result in a loss of 58 acres of rabbit and waterfowl hunting area to shotgun hunters. The effects to duck hunters would be the same as Alternative 2 - Proposed Action. Grouse and ptarmigan hunters would have 740 acres to hunt on McGinnis Mountain, which is the same as Alternative 3.

There would be no safety concerns resulting from hunting waterfowl or rabbits in this alternative. The safety concerns related to hunting grouse and ptarmigan would be the same in this alternative as in Alternative 3. Safety concerns related to illegal use of firearms would be the same as discussed in Alternative 2 - Proposed Action.

## **Alternative 5.**

This alternative would prohibit the use of all firearms in the entire Recreation Area. This would result in a loss of 58 acres of available rabbit and waterfowl hunting area, and 740 acres of grouse and ptarmigan hunting area. With the amount of hunting opportunities in the Juneau area, this would not result in a significant loss. The effects to duck hunters would be the same as Alternative 2 - Proposed Action.

Under this alternative, a complete area closure to all use of firearms would make law enforcement easier, as any discharge would be illegal. This alternative would eliminate the hunting related safety concerns within the Recreation Area. The safety concerns related to illegal firearm use would be the same as Alternative 2 - Proposed Action.

## **Alternative 6.**

The effects of this alternative would be the same as those described in Alternative 3.

## **D. Issue 3 - Commercial Use**

This issue reflects public concern that the amount of authorized commercial uses (tourism, outfitter/guide ventures) is negatively affecting the recreational experience within the Recreation Area. Negative impacts include crowding, capacity of the infrastructure and facilities to accommodate use, degradation of the visitor experience, and public health and safety concerns with overcrowding. There is also increased demand for more commercial use at the Visitor Center as well as throughout the entire Recreation Area.

This issue will be evaluated in terms of the current and future total capacity at the Visitor Center based on facility capacity designs; what the visitor should expect per ROS class for the Visitor Center, trails and Mendenhall Lake and River; the effect on visitors of a range of commercial use levels; the effect on business opportunities; and allocation levels and potential for business growth.

### **Common to All Alternatives Except Alternative 1 - No Action**

Commercial use allocation levels apply only during the peak summer tour season (May 15 - September 15). Off season and shoulder season use are not under these allocation levels.

**Proposed Commercial Use Allocation Levels - All Alternatives**

Based on the capacity analysis, commercial use allocation levels are proposed at the following levels:

**Table 4-1. Summary of Proposed Commercial Use Allocation - All Alternatives**

Alternative	Site	ROS Class Managed For	Commercial Use Allocation: visitors/summer	Commercial Use Allocation: visitors/day	% of Capacity
1	Visitor Center	U	Case-by-case	Case-by-case	--
1	Trails	RN/SPM/SPNM	Case-by-case	Case-by-case	--
1	Lake/River	RN/SPM	Case-by-case	Case-by-case	--
2	Visitor Center	U	246,570 (existing VC) 462,190 (expanded VC)	1,990 (existing VC) 3,730 (expanded VC)	65%
2	Trails	RN	No Capacity Limit Set	No Capacity Limit Set	--
2	Lake	SPM	2,980	24	65%
2	River	SPM	38,190	308	65%
3	Visitor Center	U	284,500 (existing VC) 533,300 (expanded VC)	2,290 (existing VC) 4,300 (expanded VC)	75%
3	Trails	RN	W.Glacier: 5,950 Moraine Eco: 5,950 E.Glacier: 5,950	W.Glacier: 48 Moraine Eco: 48 E.Glacier: 48	20%
3	Lake	SPM	3,720	30	75%
3	River	SPM	43,030	347	75%
4	Visitor Center	U	189,670 (existing VC) 355,530 (expanded VC)	1,530 (existing VC) 2,870 (expanded VC)	50%
4	Trails	RN	E.Glacier: 5,950 Nugget Ck: 2,980	E.Glacier: 48 Nugget Ck: 24	20%

**Table 4-1. Summary of Proposed Commercial Use Allocation - All Alternatives (continued)**

Alternative	Site	ROS Class Managed For	Commercial Use Allocation: visitors/summer	Commercial Use Allocation: visitors/day	% of Capacity
4	Lake	SPM	1,860	15	50%
4	River	SPM	31,000	250	50%
5	Visitor Center	U	179,750 (existing VC) 179,750 (expanded VC)	1,470 (existing VC) 1,470 (expanded VC)	—
5	Trails	RN	No Commercial Use Allowed	No Commercial Use Allowed	—
5	Lake	SPM	160	—	—
5	River	SPM	25,700	210	—
6	Visitor Center	U	246,570 (existing VC) 462,190 (expanded VC)	1,990 (existing VC) 3,730 (expanded VC)	65%
6	Trails	RN	E.Glacier: 5,950 Nugget Ck: 2,980 W.Glacier: 4,220	E.Glacier: 48 Nugget Ck: 24 W.Glacier: 48* *(Mon-Fri only)	20%
6	Lake	SPM	2,980	24	65%
6	River	SPM	38,190	308	65%

**ROS Classes:**

U = Urban

R = Rural

RN = Roaded Natural

SPM = Semi-primitive Motorized

SPNM = Semi-primitive Non-Motorized

Note: Numbers are rounded to nearest 10

**Alternative 1 - No Action**

Under the 1975 Management Plan, management direction is to provide for a balance of experiences to accommodate tourism and local public use (USDA Forest Service, 1975, page 16). The primary emphasis would be placed on the key glacial and aesthetic attractions. Commercial activities are allowed that serve to meet this management direction.

Under this alternative, commercial use that is compatible with area values is allowed on a case-by-case basis after additional NEPA analysis. Commercial use allocation levels are not established in the Recreation Area, though they could be established in the future. Commercial concessions such as food or beverage carts, coffee shops, trinket sales, or commercial developments such as a bar, aerial tram, vista lodge, hotel, golf course, fish hatchery, ice skating rink, and similar commercial operations are prohibited (USDA Forest Service, 1975, page 19).

This alternative could allow for relatively large increases in commercial growth in the Recreation Area. Commercial uses could be expected to increase in response to increasing visitation to the Juneau area.

### **Visitor Center**

Under this alternative, the results of this increased commercial demand would be increased visitors to the Visitor Center which could result in exceeding existing design capacity and visitors turned away from the Visitor Center. While the ROS class for this site is classified as Urban, visitor experience would likely be diminished due to crowding. There are early indications that some visitors on package tours are not satisfied with their experience at the Visitor Center (USDA Forest Service, 1995m).

There would be continuous, high levels of use throughout the day at the Visitor Center, parking areas, in the bus and covered viewing shelters, and on trails adjacent to the Visitor Center. This would result in visitors experiencing overcrowding throughout the site, inability to get into the Visitor Center to see interpretive exhibits and displays, and long lines for restrooms and theater programs. This would decrease satisfaction with their recreation experience.

Because of crowded conditions at the Visitor Center, some visitors would disperse to other sites in the Recreation Area, or to other areas. Some visitors would wait until after hours to use the Visitor Center site, but as a result would not be able to utilize the facilities or participate in interpretive programs. Some visitors would still come out to the site, but would experience decreased satisfaction overall.

Under this alternative, increases in commercial use would impact the infrastructure of the Recreation Area, resulting in increased maintenance costs for the bus and covered viewing shelters, the Visitor Center, and the parking areas. Increased commercial use would also result in parking lots at full capacity, increased congestion, and inability of some visitors to access the Visitor Center from parking areas. This would result in some visitors parking and walking along the road to access the Visitor Center, increasing the potential for vehicle/pedestrian accidents.

Increased visitation would also result in greater numbers of visitors able to view and enjoy the Mendenhall Glacier. For visitors who are in the community only a short while, package tours and trips can increase the satisfaction of their recreation experience.

New types of tours compatible with area values could occur, resulting in a larger selection of tour opportunities for visitors. This could lead to increased visitor satisfaction because of the increased variety of tours to choose from. New tours could also enhance visitors' recreation experience by providing the opportunity to try more adventure type tours in a safe environment.

This alternative would provide more opportunities than Alternatives 2 through 6 for commercial growth of existing tour businesses as well as new opportunities for new business ventures. This could result in increased revenues for commercial operators. This, in turn, would result in increased tax revenues for local and state governments, increased local employment opportunities, and a more diversified economy for the local community. Higher levels of commercial use would also mean increased special use permit fees collected and sent to the U.S. Treasury.

Under this alternative, commercial developments, facilities, or concessions are prohibited. This would continue the existing condition and would not open up new areas for concession type operations. Visitors would still be serviced by private businesses within five to ten miles of the Visitor Center and other access points in the Recreation Area. Some visitors' recreation experience would be diminished because these types of amenities are not available on site. Other visitors' recreation experience would be enhanced because their recreation experience would be more of a "natural setting" and less of a "market" type atmosphere. There would be less crowding and congestion in parking areas, resulting in reduced traffic/pedestrian conflicts and public safety concerns, and more parking for visitors. There would be less litter and refuse. The Recreation Area's natural character would also be retained, resulting in a higher level of visitor satisfaction with their recreation experience.

### **Trails**

Under this alternative, hiking tours could be considered on trails throughout the Recreation Area. There would be no specified group size restrictions.

On the high use trails, such as East Glacier, West Glacier, Photo Point, Moraine Ecology, and the Trail of Time, hikers would experience contact with groups ranging in size from five to fifteen persons on guided hiking tours. With this level of encounters, visitors would experience a decrease in solitude from current conditions when using these trails during the summer season. This decrease in solitude would degrade the visitors' experience. ROS class could be expected to change on trails from Roaded Natural to Rural, where people could expect to meet more than twenty parties of people per day.

This level of use on these trails, particularly the East Glacier and West Glacier trails, could result in dispersing some visitors who seek a more solitary experience to other trails on the National Forest or on State or City and Borough lands. This could result in increased use and potential impacts to other trails, and a reduction in solitude for other users of these trails.

As guided hiking could occur on other trails in the Recreation Area, this would mean that other visitors who use these trails would experience a decrease in solitude from current conditions where most existing use is concentrated near the Visitor Center. This decrease in solitude would degrade the visitors' experience. For visitors who desire a guided tour to more remote areas of the Recreation Area, this would enhance their recreation experience.

New hiking tours compatible with area values could result in a larger selection of tour opportunities for visitors. This could lead to increased visitor satisfaction because of the increased variety of tours to choose from. New tours could also enhance visitors' recreation experience by providing the opportunity to try more adventure type tours in a guided environment.

Effects would be the same as noted above for the Visitor Center regarding more opportunities for commercial use, as well as increased revenues and special use permit fees collected.

### **Mendenhall Lake and Mendenhall River**

Large increases in commercial use on Mendenhall Lake and River could be expected under this alternative as no commercial use allocation levels are established for this use. This is anticipated due to the increase of special use permit applications being received.

Under this alternative, there would be increased tour opportunities for visitors. Levels of use however, could be expected to be high, and increased use on the lake and river could lead to diminished recreation experience for visitors who expect moderate interactions with other users. ROS class could be expected to change on the lake and river from Roaded Natural to Rural, where people could expect to meet more than twenty parties a day.



Residents who live adjacent to the Recreation Area and along the river would experience the greatest decrease in solitude and privacy of all the alternatives because there are no allocation levels.

Increased use at the West Glacier Trailhead by both commercial and private visitors would increase traffic and parking congestion, and could negatively affect some visitors' recreation experience. Parking may not be available for some visitors, and some visitors may park and walk along the road to get to the trailhead. This could lead to potential vehicle/pedestrian accidents. With increased commercial use at the West Glacier Trailhead, there would also be increased traffic along the road, resulting in decreased solitude for visitors using the Skater's Cabin day use site and the campground. This could negatively affect their recreation experience.

Except for concessions, effects would be the same as noted above for the Visitor Center regarding more opportunities for commercial use, as well as increased special use permit fees collected.

### **Recreation Area Overall**

Under this alternative, the desired future condition is stated in the overall management direction, which is to be "managing for a near natural environment with an emphasis on glacial and aesthetic values. Provide for a balance of experiences to accommodate tourism and local public use...Management in the area is directed at low to moderate levels of use with the exception of the Visitor Center which is intensively used."

Moderate levels of use could be expected throughout a major portion of the Recreation Area, based on commercial use applications and interest in the Recreation Area. Low levels of use would most likely continue on McGinnis Mountain. Some areas outside the Visitor Center Unit (Mendenhall River, East Glacier Trail, West Glacier Trail, West Glacier Trailhead) would receive intensive use.

Out of all the alternatives, this alternative offers the least solitude for visitors and the most opportunities for economic growth for commercial users.

### **Alternative 2 - Proposed Action**

Under this alternative, proposed commercial use could be limited to 65% of capacity for the Visitor Center (both the existing and new facility) and for Mendenhall Lake and Mendenhall River. There are no commercial use allocation levels identified for trails. Guided hiking could be considered for any trail in the Recreation Area as long as commercial use meets Forest Service special use permit criteria, Recreation Area commercial use criteria, and is a bona fide public need,. These would be the only areas where commercial use could occur in the Recreation Area.

Commercial developments, facilities, and concessions are not allowed and effects would be the same as Alternative 1 - No Action.

### **Visitor Center**

Under this alternative there could be an increase by 66,800 more visitors on tours per summer, or approximately 540 more people on tours per day. Continued commercial growth at the Visitor Center would be allowed until commercial use allocation levels would be reached. High concentrations of use would continue at the Visitor Center. Consequences would be similar to, but less than Alternative 1 - No Action because commercial allocation levels would be established. Visitation would not exceed existing design capacity, nor preclude other public use as long as non-commercial public use does not exceed 35% of capacity.

There would be continuous high levels of use throughout the day in the Visitor Center, parking areas, in the bus and covered viewing shelters, and on trails adjacent to the Visitor Center as use levels

would be 30% higher than current authorized commercial use levels. While the ROS class for this site is classified as Urban, some visitors would experience a diminished recreation experience due to high use levels and a sense of crowding. For the visitors who feel crowded, effects would be the same as Alternative 1 - No Action.

Under this alternative, visitors would be less likely to experience overcrowding throughout the site than Alternative 1 - No Action, and would be more likely to get into the Visitor Center to see interpretive exhibits and displays. While use levels would be higher than the existing condition, lines and waiting periods would be similar though somewhat greater than the existing condition.

Increased visitation would impact the infrastructure of the Recreation Area but would be less than Alternative 1 - No Action, because of limits on commercial use levels.

Once the commercial use allocation level is reached, some visitors may not be able to tour the Visitor Center because number of tours would be limited. This could decrease some visitors satisfaction with their tour experience to Juneau. Some of these visitors may also disperse to other tour attractions in the community, or new tours being offered in the Recreation Area. This could result in increased satisfaction of their recreation experience, especially if they are seeking more adventure type tours.

This alternative would provide more opportunities for commercial growth of existing tour businesses as well as new opportunities for new business ventures. Effects would be similar to but less than Alternative 1 - No Action. Opportunities for future commercial growth could be available for the next 4-12 years, depending on commercial growth rates, before commercial use allocation levels would be reached (see Graphs 4-1 and 4-2).

While this alternative provides for additional commercial growth, it would be less than Alternative 1 - No Action, which has no commercial use allocation levels. For the Visitor Center, this alternative would result in a 35% increase over existing use. Once commercial use allocation levels were reached, opportunities for commercial growth would be limited until the Visitor Center expansion project to increase site capacity is completed. Once the Visitor Center expansion project is completed, opportunities for future commercial growth could be 16-20+ years, before allocation levels are reached.

Higher levels of commercial use would also mean increased tax revenues and special use permit fees collected, but would be less than Alternative 1 - No Action because of commercial use limits.

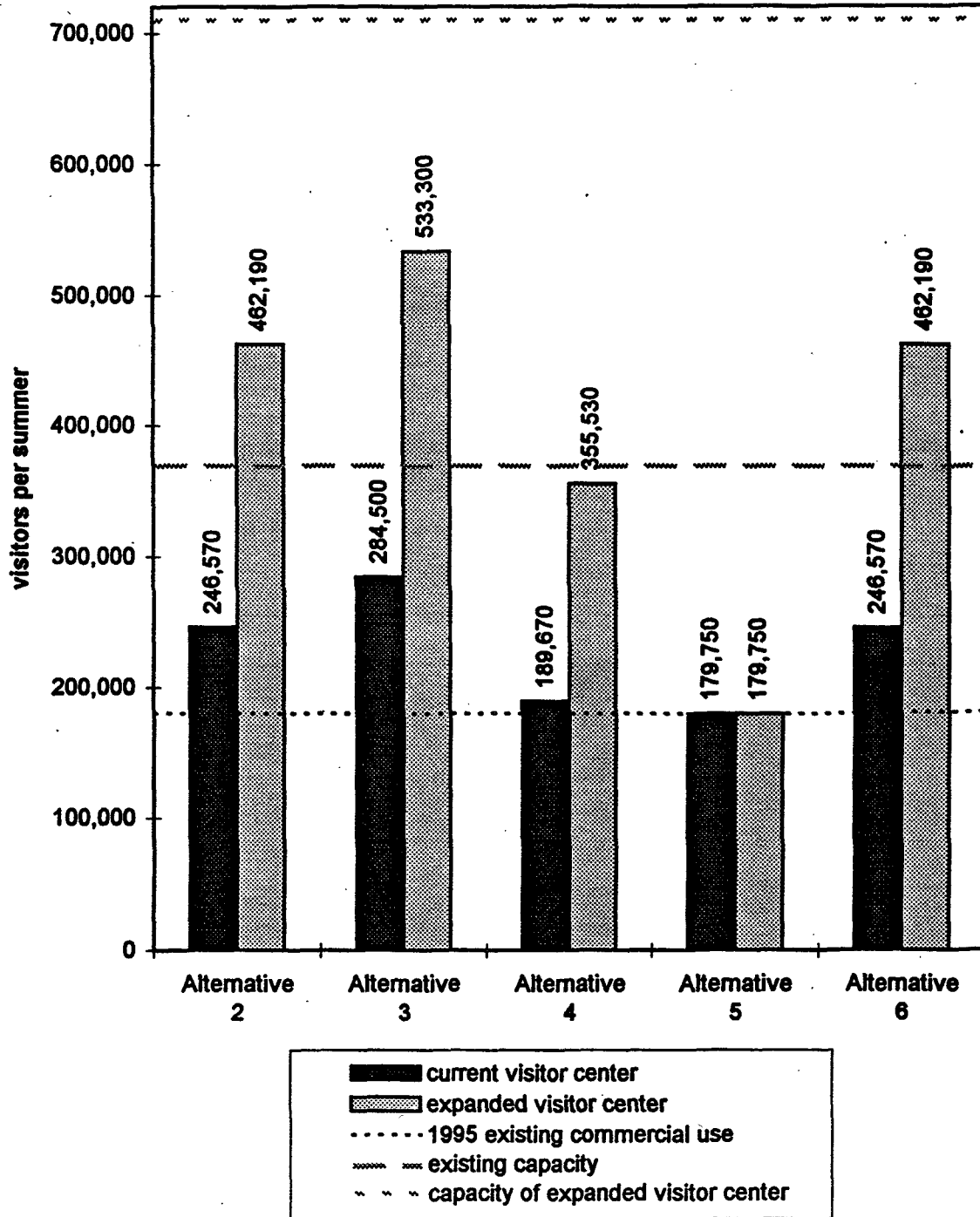
Because there is competitive interest from a large number of operators who would like to offer tours to the Visitor Center, a prospectus and bid process would most likely be used to award permits. This would result in greater competition among commercial users and would most likely result in some operators not being awarded commercial use. This would result in reduced business opportunities for some commercial users, while allowing other commercial users room for growth.

A prospectus and bid process as described in Forest Service Manual 2712 could also result in higher special use permit fees being generated, resulting in increased special use permit fees collected. Additionally, during a prospectus and bid process, priority use and ANILCA local/native preference would also apply (priority use for the Visitor Center, trails, Mendenhall River and Lake; ANILCA preference only for commercial use on the Moraine Ecology Trail). This could further reduce opportunities for new businesses, while maintaining or increasing business opportunities for businesses that qualify.

#### **Trails**

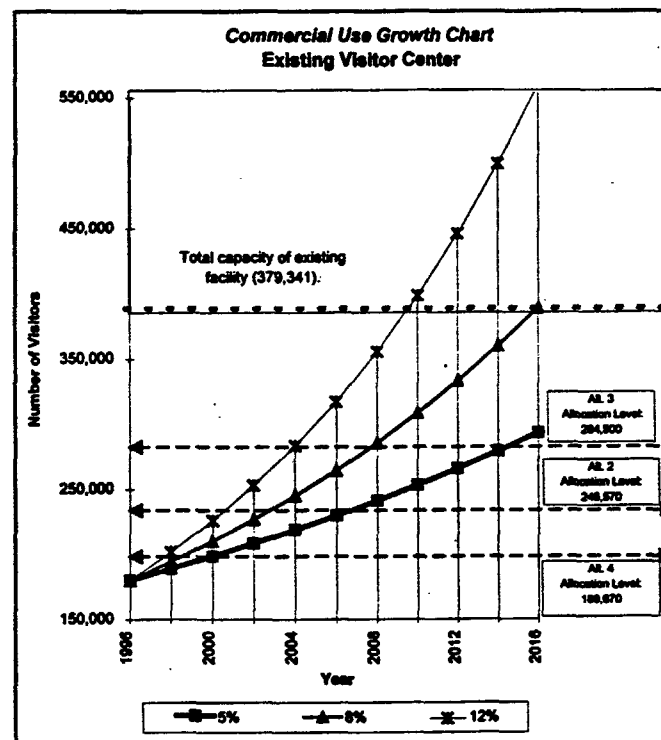
Since this alternative does not allocate commercial use levels on trails, it would have the same effect to the visitor's experience on trails as Alternative 1 - No Action.

**Graph 4-1. Opportunities for Commercial Use by Alternative - Visitor Center.**

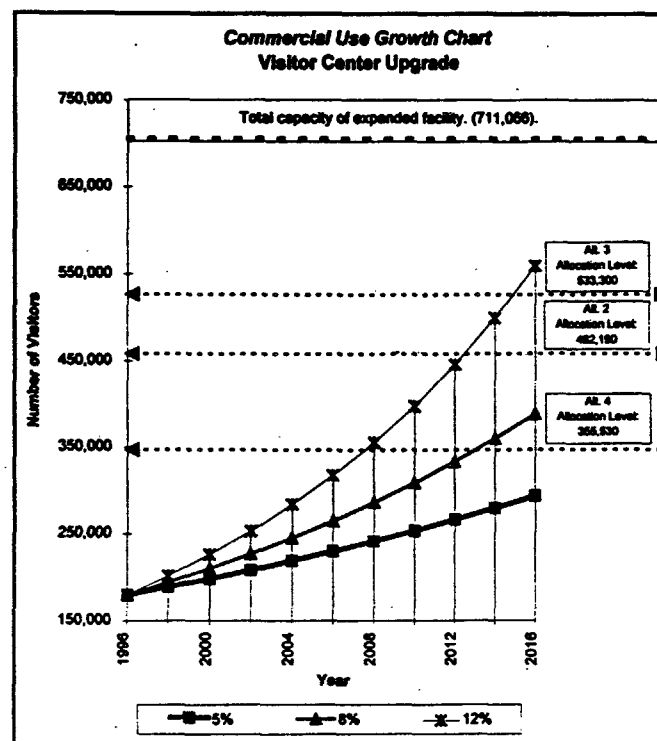


No commercial allocation is made for Alternative 1.

**Graph 4-2. Potential Commercial Use Growth - Visitor Center.**



**Graph 4-3. Potential Commercial Use Growth - Expanded Visitor Center.**



This alternative would have the same effect on commercial use as Alternative 1 - No Action. Under this alternative, new commercial use would also have to meet established criteria. Effects would be similar to Alternative 1 - No Action because commercial use under Alternative 1 has similar requirements of furthering understanding and appreciation of glacial phenomena.

### **Mendenhall Lake and Mendenhall River**

Visitors on the river could expect to have moderate to high levels of interactions with other users on the river. Visitors on the lake could expect to have low to moderate levels of interaction with other users on the lake and at the West Glacier Trailhead.

This alternative could decrease some visitors' sense of solitude on the Mendenhall River as there could be an increase above current use levels by 12,000 more visitors per summer. This level of use would result in moderate interaction levels with other users, because there would be a greater number of rafts on the river at one time. Total encounters on the river would be four encounters per day or less.

For residents who live adjacent to the Recreation Area and along the river, their sense of solitude and privacy would be decreased, but less than Alternative 1 - No Action, which does not allocate commercial use levels.

This alternative would allow an increase over current use of 2,820 more visitors on tour per summer on Mendenhall Lake. This level of use would result in low interaction levels with other users, because while use would increase, there would only be two encounters per day or less. On Mendenhall Lake, some visitors could expect to experience less solitude than the existing condition as there would be two groups of twelve boaters on the lake during the day. Some visitors' recreation experience may be diminished by an increase in tours on the lake because encounters would last for a longer period of time, while others would experience a greater satisfaction level due to the opportunity to boat this area.

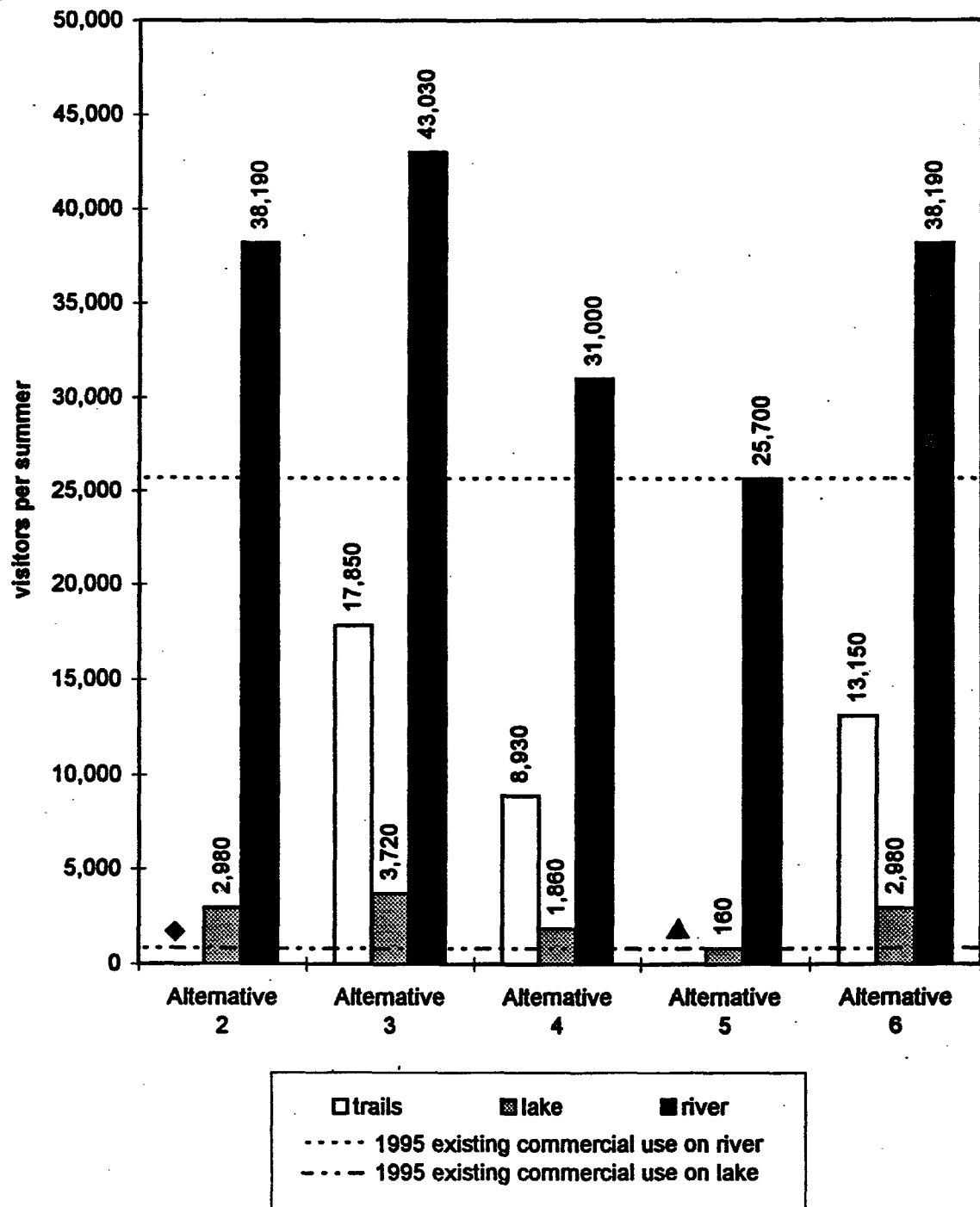
This alternative would provide more opportunities for commercial growth of existing tour businesses as well as new opportunities for new business ventures. Effects would be similar to but less than Alternative 1 - No Action.

While this alternative provides for additional commercial growth, it would be less than Alternative 1 - No Action because of commercial allocation levels. For Mendenhall River, this alternative would result in a 48% increase over existing use which was 25,700 visitors in 1995. For use on Mendenhall Lake, this alternative would result in an 1800% increase over existing use which was 160 visitors in 1995. Once commercial use allocation levels were reached, opportunities for commercial growth would be limited.

Opportunities for commercial growth could be available for the next 7-16 years for river use, and 5-10 years for lake use (lake use levels would likely be reached sooner than indicated due to lower allocation levels), depending on commercial growth rates (see Graph 4-4, Graph 4-5 and Graph 4-6).

Higher levels of commercial use would also mean increased special use permit

**Graph 4-4. Opportunities for Commercial use by Alternative.**

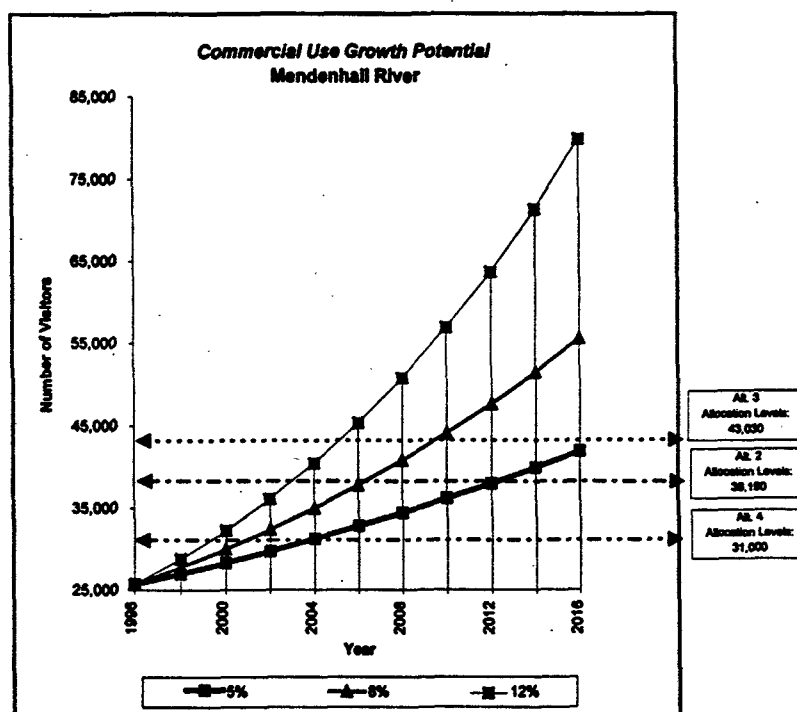


◆ Commercial allocation for trails on a case-by-case basis in Alternative 2.

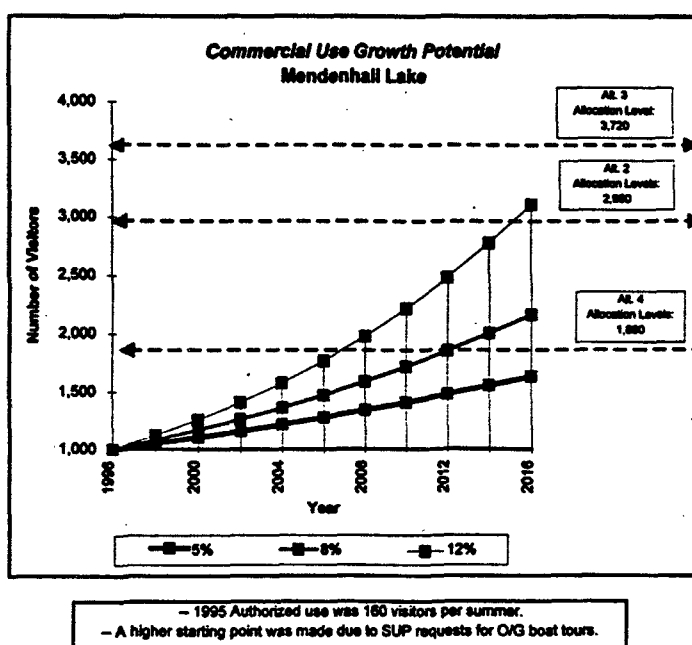
▲ No commercial trail use is allowed in Alternative 5.

No commercial allocation is made for Alternative 1.

Graph 4-5. Potential Commercial Use Growth - Mendenhall River.



Graph 4-6. Potential commercial use growth - Mendenhall Lake.



fees collected and sent to the U.S. Treasury, though because of commercial use limits, this could be less than Alternative 1 - No Action. Effects would be the same regarding competitive interest and prospectus and bid process as noted above for the Visitor Center.

### **Recreation Area Overall**

Under this alternative, low levels of use could be expected on Mendenhall Lake, moderate levels of use could be expected on the Mendenhall River and West Glacier Trailhead, and high levels of use would be expected in the Visitor Center Unit. Some trails adjacent to the Visitor Center (East Glacier Trail, West Glacier Trail, Moraine Ecology Trail) would receive moderate to intensive use. Because of levels of outfitter/guide hiking tours on some trails, the ROS class could change from Roaded Natural to Rural. Effects of this increased commercial use would be the same as Alternative 1 - No Action.

Commercial use criteria for issuing special use permits would help limit the number of commercial operations conducted within the Recreation Area in this alternative. This would result in less impact to the visitor experience of solitude than Alternative 1 - No Action. These criteria would also insure that commercial operations authorized would be consistent with the management direction and the purpose of designation of the Recreation Area. Permits would not be issued unless the authorized activity would be consistent with these criteria. This could result in some commercial operators not being able to qualify, which could reduce potential business opportunities.

Criteria established for recreation special events (weddings, road races, "fun runs", etc.) used in conjunction with recent regulatory changes regarding non-commercial group use, would create consistency regarding approvals of such events, resulting in limiting impacts to other users and natural resources in the Recreation Area.

### **Alternative 3**

Under this alternative, proposed commercial use could be limited to 75% of capacity for the Visitor Center (both the existing and new facility) and on Mendenhall Lake and Mendenhall River. Commercial use allocation levels could be limited to 20% of capacity on three designated trails. These would be the only areas where commercial use could occur.

Commercial concession facilities or services (food and beverage services, photography concessions, gift stands, recreation equipment rentals) would be authorized if they meet specific commercial use criteria (same as Alternative 2 - Proposed Action), including bona fide public need.

### **Visitor Center**

Under this alternative there could be an increase of 109,750 more visitors on tours per summer, or approximately 840 more people on tours per day. Continued commercial growth at the Visitor Center would be allowed until commercial use allocation levels were reached. High concentrations of use would still occur at the Visitor Center. Consequences would be similar to, but less than Alternative 1 - No Action and greater than Alternative 2 - Proposed Action. Visitation would not exceed existing capacity, nor preclude other public use as long as non-commercial public use did not exceed 25% of capacity.

There would be continuous high levels of use throughout the day in the Visitor Center, parking areas, in the bus and covered viewing shelters, and on trails adjacent to the Visitor Center as use levels would be 58% higher than current authorized commercial use levels. Some visitors would experience a diminished recreation experience due to high use levels and a sense of crowding. Effects would be less than Alternative 1 - No Action, but more than Alternative 2 - Proposed Action.



Under this alternative, visitors would more likely experience a sense of overcrowding throughout the site, and would be less likely to get into the Visitor Center to see interpretive exhibits and displays. Lines and waiting periods for the theater program and restrooms would be greater than the existing condition. For some visitors this would decrease their satisfaction with their recreation experience.

For visitors who feel crowded, effects would be the same as Alternative 1 - No Action.

Increased visitation would impact the infrastructure of the Recreation Area. Effects would be less than Alternative 1 - No Action because of commercial use limits. Some visitors' recreation experience would also be diminished because of increased crowding and congestion in parking lots and sidewalk areas. Effects would be the same as Alternative 1 - No Action.

Once the commercial use allocation level was reached, some visitors may not be able to tour the Visitor Center because number of tours would be limited. Effects would be similar to Alternative 2 - Proposed Action but would allow more people to visit than Alternative 2 - Proposed Action. Under this alternative, there would also be new types of tours available for visitors. Effects of new tours on visitor experience would be the same as Alternative 1 - No Action.

Commercial concessions at the Visitor Center and other access points to the Recreation Area would provide food and beverage services, photography concessions, recreation equipment rentals, or gifts and souvenirs for visitors. Some visitors' recreation experience may be enhanced due to increased amenities and services. Other visitors' recreation experience would be diminished because they would view this high commercial use as loss of the area's natural character and the creation of an "open market" setting. Commercial concessions would affect the visitor recreation experience at the Visitor Center and other access points to the Recreation Area by affecting visual quality and creating a more developed, urban experience. This would reduce the recreation experience for some visitors who want to experience the Recreation Area's natural character and emphasis on a deglaciated landscape.

Under this alternative, opportunities for commercial growth would be less than Alternative 1 - No Action, and greater than Alternative 2 - Proposed Action. Opportunities for commercial growth, depending on commercial growth rates, could be available for the next 8-18 years before commercial allocation levels were reached (see Graph 4-2).

While this alternative provides for additional commercial growth, it would be less than Alternative 1 - No Action, which has no commercial use allocation levels. Once commercial use allocation limits were reached, opportunities would be limited until the Visitor Center expansion project to increase site capacity is completed. Once the Visitor Center expansion project is complete, opportunities for commercial growth could be available for 20 or more years, depending on growth rates (see Graph 4-3).

Commercial concessions at the Visitor Center and other access points to the Recreation Area would provide new opportunities for vendors. Concessions would also compete with other established businesses in the nearby area. Commercial use criteria may also limit qualified vendors, reducing some commercial opportunities.

Effects on competitive interest and a prospectus and bid process would be the same as Alternative 2 - Proposed Action.

### Trails

New commercial use on the West Glacier Trail, East Glacier Trail, and Moraine Ecology Trail could affect visitor recreation experience. There would be an additional 48 visitors per day, or a total of 17,850 visitors on these three trails during the summer. This level of use would be less than Alternative

1 - No Action, however it would also result in a decrease of solitude for visitors who expect a low to moderate level of interaction with other visitors on these trails.

Currently, only the West Glacier Trail receives commercial tour use (fourteen people were guided on this trail in 1995). Under this alternative, trail capacity limits would retain the Roaded Natural ROS class. Visitors would experience a decrease in solitude from current use levels. However the decrease in solitude would be less for this alternative than for Alternative 1 - No Action, because this alternative would limit the amount of guided hiking and designate commercial use on three trails only.

This level of use on these trails, particularly the East Glacier and West Glacier Trails, could result in dispersing some visitors who seek a more solitary experience to other areas. This could result in increased use and potential impacts to other trails, and a reduction in solitude for other users of other trails.

While some visitor recreation experience may be affected by commercial tours on these trails, other visitors recreation experience may be enhanced because of the guided tour opportunity. New hiking tours, including adventure type tours, could also result in a larger selection of tour opportunities for visitors, resulting in increased visitor satisfaction.

While this alternative provides for additional commercial growth, it would be less than Alternative 1 - No Action or Alternative 2 - Proposed Action, as neither of these alternatives have commercial use limits on trails. For trails, this alternative would result in a significant increase over existing authorized use, which currently is fourteen visitors per summer (see Graph 4-4). Once commercial use allocation levels were reached, commercial growth opportunities would be limited. However, opportunities for commercial use could be available for the next 20 or more years, depending on commercial growth rates (see Graph 4-7).

Effects on revenues and special use permit fees would be less than Alternative 1 - No Action, because there are no commercial allocation limits under Alternative 1 - No Action.

Effects would be the same regarding competitive interest and prospectus and bid process as for the Visitor Center, Alternative 2 - Proposed Action.

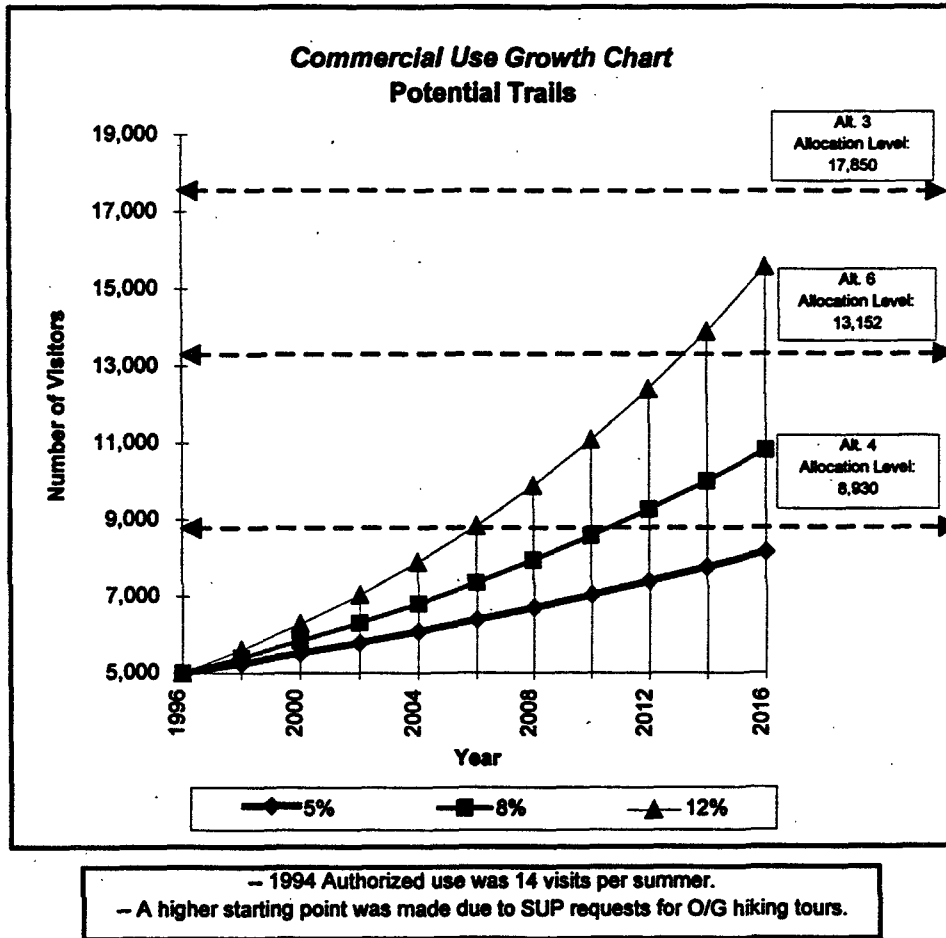
#### **Mendenhall Lake and Mendenhall River**

Under this alternative, visitors on the river could expect to have moderate to high levels of interactions with other users on the river. Visitors on the lake could expect to have low to moderate levels of interaction with other users on the lake.

Commercial use levels on Mendenhall Lake could be the highest of all alternatives, except for Alternative 1 - No Action. Some visitors' recreation experience may be diminished on Mendenhall Lake by increased use because encounters would last for a longer period of time and there would be a decreased sense of solitude over the existing condition. Other visitors would have an enhanced recreation experience due to the opportunity to boat this area. This alternative would allow an increase of 3,560 more visitors on tour per summer on Mendenhall Lake. Total encounters on the lake would average 2.5 trips per day or less, with no more than thirty people per day.

This alternative could decrease visitors' sense of solitude on the Mendenhall River as there could be 20,330 more visitors per summer. This level of use would result in moderate to high interactions with other users with more people

Graph 4-7. Potential commercial use growth - Trails.



on the river at one time. The number of encounters per day would average 4.5 or less.

For residents who live adjacent to the Recreation Area and along the river, their sense of solitude and privacy would be decreased the most of all alternatives, except Alternative 1 - No Action, which does not allocate commercial use limits.

Motorized boat tours would also be allowed on Mendenhall Lake and River. For some visitors who expect a non-motorized boating experience, this would diminish their recreation experience because of an increase in noise and visual presence of motorized boats. For other visitors who enjoy motorized recreational boating, this could enhance their experience by providing a new recreation opportunity.

This alternative would provide more opportunities for commercial growth of existing tour businesses as well as new opportunities for new business ventures. Effects would be similar but less than Alternative 1 - No Action.

While this alternative provides for additional commercial growth, it would be less than Alternative 1 - No Action, because of commercial use limits but more than Alternative 2 - Proposed Action. Depending on growth rates, opportunities for commercial growth could be available for the next 9-20 years for river use, and 5-10 years for lake use (lake use levels would likely be reached sooner than indicated due to lower allocation levels), depending on commercial growth rates (see Graph 4-5 and Graph 4-6).

Effects on revenues and special use permit fees collected would be less than Alternative 1 - No Action, but greater than Alternative 2 - Proposed Action. Effects would be the same regarding competitive interest and prospectus and bid process as noted for the Visitor Center in Alternative 2 - Proposed Action.

#### **Recreation Area Overall**

This alternative would result in an increase of commercial use in the Recreation Area over existing use by approximately 139,900 visitors per summer. This would allow the highest level of commercial use, resulting in the highest number of commercial tours available for visitors to the Recreation Area, except for Alternative 1 - No Action.

Under this alternative, low levels of use could be expected on Mendenhall Lake, moderate to high levels of use could be expected on the Mendenhall River and West Glacier Trailhead, and high levels of use would be expected in the Visitor Center Unit.

Allowing commercial concessions would affect the area's overall "natural character" and not provide the maximum contrast with an urbanized environment. This would diminish some visitors' recreation experience and would not provide as high a quality recreation experience.

Effects for commercial use criteria for issuing special use permits would be the same as Alternative 2 - Proposed Action.

Effects for special event special use permits would be the same as Alternative 2 - Proposed Action.

#### **Alternative 4**

Under this alternative, proposed commercial use could be limited to 50% of capacity for the Visitor Center (both the existing and new facility) and on Mendenhall Lake and Mendenhall River. Commercial use allocation levels could be limited to 20% of capacity on two designated trails. These would be the only areas where commercial use could occur.

Commercial concession facilities or services (food and beverage services, photography concessions, gift stands, recreation equipment rentals) would be prohibited under this alternative. Effects would be the same as Alternative 1 - No Action.

### Visitor Center

Under this alternative there could be an increase of 10,900 visitors on tours per summer, or approximately eighty people on tours per day. High concentrations of use would occur at the Visitor Center but would be similar to existing use levels. Visitation would not exceed existing design capacity, nor preclude other public use as long as non-commercial public use is 50% of capacity.

There would be high levels of use throughout the day in the Visitor Center, parking areas, in the bus and covered viewing shelters, and on trails adjacent to the Visitor Center, but these levels would only be 5% higher than current authorized commercial use levels. Some visitors would still experience a diminished recreation experience due to high use levels and a sense of crowding. Effects would be the same as Alternative 1 - No Action.

High levels of crowding would occur but would not be continuous. There would be peak periods of use with slower, less congested periods of use, similar to 1995 use levels. In the parking areas, in the bus and covered viewing shelters, in the Visitor Center building, and on trails adjacent to the Visitor Center, there would be high levels of interactions with other users, however, this would be less than Alternatives 1 - No Action. Lines and waiting periods for the theater program and restrooms would be similar to the existing condition.

Increased visitation would impact the infrastructure of the Recreation Area but at the same level as the existing condition.

Once the commercial use allocation level is reached, the number of visitors who may not be able to tour the Visitor Center because number of tours would be limited would be higher than any other alternative except Alternative 5. Effects would be greater than Alternative 2 - Proposed Action.

While new types of tours could be offered, it is unlikely that authorized use levels could be high enough to attract a new tour venture. Visitors would not have a variety of tour experiences to choose from under this alternative, with tours most likely consisting of existing bus, mini-van and taxi tours. This could diminish some visitors' recreation experience who are seeking a diversity in tours. It also could result in some visitors seeking out other tour experiences in the Recreation Area or other areas.

Under this alternative, effects on commercial use would be less than Alternative 1 - No Action, because there would be little room for commercial growth. Except for Alternative 5, this alternative would be the most limiting in terms of potential commercial growth opportunities (see Graph 4-1). Opportunities for commercial growth, depending on commercial growth rates, could be available for the next 1-2 years, before commercial use allocation levels are reached (see Graph 4-2).

While this alternative provides for additional commercial growth, it would be less than Alternative 1 - No Action, which has no commercial use allocation levels. Once commercial use allocation limits were reached, opportunities would be limited until the Visitor Center expansion project to increase site capacity is completed. Once the Visitor Center expansion project is completed, opportunities for commercial growth could be available for the next 12-20 years (see Graph 4-3).

Effects on revenues and special use permit fees would be less than Alternative 1 - No Action because of reduced commercial growth opportunities.

Under this alternative, effects on competitive interest and prospectus and bid process would be the same as for the Visitor Center, Alternative 2 - Proposed Action.

## **Trails**

Under this alternative, guided hiking would be authorized for two trails in the Recreation Area. No other trails would be open to guided hiking.

New commercial use on the East Glacier Trail and the Nugget Creek Trail could affect visitor recreation experience. There would be an additional 48 visitors per day on the East Glacier Trail and an additional 24 visitors per day on Nugget Creek Trail, or a total of 8,930 visitors on these two trails during the summer. Hikers would experience contact with groups of up to twelve persons on a guided hiking tour. This level of use could result in a decrease of solitude for visitors who expect a low to moderate level of interaction with other visitors on these trails.

Currently, only the West Glacier Trail receives commercial tour use (fourteen people were guided on this trail in 1995). Under this alternative, trail capacity limits would retain the Roaded Natural ROS class. Visitors would experience a decrease in solitude from current levels, as there would be an additional 8,960 visitors on the two trails during the summer. However the decrease in solitude would be less for this alternative than for Alternative 1 - No Action or Alternative 2 - Proposed Action because this alternative would limit the amount of guided hiking to 48 persons per day in four groups. As outfitter/guide hiking would only be allowed on these two trails, use levels on other trails in the Recreation Area would remain the same or could increase, depending on additional public use levels.

This level of use on the East Glacier and Nugget Creek trails could result in dispersing some visitors, with effects the same as Alternative 1 - No Action.

Increases in commercial use would impact the infrastructure of the Recreation Area, but would be similar to Alternative 3.

Other effects on visitor recreation experience would also be similar to Alternative 3.

For commercial users, this alternative would allow guided hiking on 7.5 miles of trail which is 0.9 miles less than the 8.4 miles authorized under Alternative 3. Authorized use under this alternative which would be a maximum of 48 persons per day on two trails as compared to Alternative 3 which would be 144 persons per day on three trails. While this alternative would provide more opportunities for additional commercial growth, it would be less than Alternative 1 - No Action or Alternative 2 - Proposed Action. It would also be less than Alternative 3 because commercial use would only be allowed on two trails. Effects would be similar to Alternative 3, but less than Alternative 1 - No Action and Alternative 2 - Proposed Action.

For trails, this alternative would result in a significant increase over existing authorized use, which currently is fourteen visitors per summer. Effects would be less than Alternative 1 - No Action and similar to Alternative 3 regarding increased revenues and special use permit fees.

Opportunities for commercial growth, depending on commercial growth rates, could be available for the next 10-20 years, before commercial use allocation levels are reached (see Graph 4-7).

Effects would be the same regarding competitive interest and prospectus and bid process as for the Visitor Center, Alternative 2 - Proposed Action.

## **Mendenhall Lake and Mendenhall River**

Under this alternative, visitors on the river could expect to have moderate levels of interactions with other users, similar to the existing condition. Visitors on the lake could expect to have low levels of interaction with other users on the lake. There would be moderate levels of interactions with all users at the West Glacier Trailhead.

This alternative could decrease some visitors' sense of solitude on the Mendenhall River as there would be an increase above current use levels by 5,300 more visitors per summer and because there would be a greater number of rafts on the river at one time. This decreased sense of solitude would be less than Alternative 1 - No Action, but would be similar to the existing condition.

Use levels on the river could be 31,000 or an average of 250 visitors a day. Total encounters on the river would average 3.25 encounters a day or less.

For residents who live adjacent to the Recreation Area and along the river, their sense of solitude and privacy would be similar to the existing condition.

On Mendenhall Lake, use would increase over existing use levels, but would still result in low interaction levels with other users. Visitors could expect to experience less solitude than the existing condition. Effects would be less than Alternative 1 - No Action, and similar to Alternative 2 - Proposed Action because encounters would average one trip a day or less with fifteen people.

This alternative would provide some opportunities for commercial growth of existing tour businesses as well as new opportunities for new business ventures. It would provide the fewest opportunities for growth of all alternatives, except for Alternative 5. For Mendenhall River, this alternative would result in a 22% increase over existing use, which currently is 25,700 visitors per summer. For use on Mendenhall Lake, this alternative would result in a 1100% increase over existing use which currently is 160 visitors per summer.

Opportunities for future commercial growth could be available for the next 4-8 years for river use, and 5-10 years for lake use (lake use levels would likely be reached sooner than indicated due to lower allocation levels), depending on commercial growth rates (see Graph 4-5 and Graph 4-6).

Effects on increased revenues and special use permit fees collected would be less than Alternative 1 - No Action as revenues and special use permit fees would be similar to the existing condition.

Effects would be the same regarding competitive interest and prospectus and bid process as Alternative 2 - Proposed Action.

### **Recreation Area Overall**

This alternative would result in an increase of commercial use in the Recreation Area over existing use of approximately 24,152 visitors per summer. This would allow slightly higher commercial use levels than the existing condition.

Low levels of use could be expected on Mendenhall Lake, moderate levels of use could be expected on the Mendenhall River and West Glacier Trailhead, and high levels of use would be expected in the Visitor Center Unit. East Glacier Trail would receive moderate use and Nugget Creek Trail would receive low use.

Effects for commercial use criteria for issuing special use permits would be the same as Alternative 2 - Proposed Action.

Effects on prohibiting commercial concessions would be the same as Alternative 1 - No Action.

Effects for special event special use permits would be the same as Alternative 2 - Proposed Action.

## **Alternative 5**

Under this alternative, proposed commercial use could be limited to 1995 authorized use levels for the Visitor Center (both the existing and new facility) and Mendenhall Lake and Mendenhall River. Additional increases in commercial use would not be allowed. These would be the only areas where commercial use could occur.

This alternative would not allow guided hiking.

Commercial concession facilities or services would be prohibited under this alternative. Effects would be the same as Alternative 1 - No Action.

### **Visitor Center**

Under this alternative, visitors would not experience any increase in contacts with commercial groups or operations over the 1995 level. This alternative would have the least impact from commercial uses of all the alternatives.

Visitors could expect the commercial use level to remain at the current level even after the Visitor Center expansion is complete. This alternative would provide the same type of visitor recreation experience that is now available. Visitors' recreation experience would be enhanced because there would be less crowding once the new Visitor Center is built than any of the other alternatives.

High concentrations of use would occur at the Visitor Center at existing use levels. Visitation would not exceed existing capacity, nor preclude other non-commercial public use, unless public visitation increased dramatically.

There could be high levels of use throughout the day in the Visitor Center, parking areas, in the bus and covered viewing shelters, and on trails adjacent to the Visitor Center but these levels would be the same as the existing condition. Some visitors would still experience a diminished recreation experience due to high use levels with effects the same as Alternative 1 - No Action.

Under this alternative, other effects on visitor experience would be similar to but less than Alternative 4.

Once the commercial use allocation level is reached, the number of visitors who may not be able to tour the Visitor Center because number of tours would be limited would be the highest of all alternatives. Effects would be similar to, but greater than Alternative 4.

When the Visitor Center expansion is complete, the effects of limiting tours to 1995 commercial use levels would be significantly higher as many visitors would be precluded from visiting the Visitor Center and the Recreation Area. This could greatly reduce visitors' satisfaction with their tour experience to Juneau. Visitors who do come out to the Visitor Center once the expansion is complete would experience more solitude than any other alternative, enhancing their recreation experience. ROS class could conceivably change from an Urban ROS class to a Rural ROS setting. Design capacity of the new Visitor Center would likely not be reached.

Effects on variety of tour experiences would be less than Alternative 1 - No Action and similar to Alternative 4.



This alternative allows for existing commercial tour use at the Visitor Center, but does not allow for growth or new commercial uses at the Visitor Center. Effects would be similar to but less than Alternative 4.

Opportunities for new commercial growth would not be available, thus limiting future opportunities for commercial operators. When the Visitor Center expansion project is completed, commercial use limits would still be this 1995 use levels. This would result in no new commercial growth opportunities in the future, despite increased capacity at the new Visitor Center. This alternative would maintain revenue and special use permit fees levels at the existing revenue levels.

Effects on competitive interest and prospectus and bid process would be similar to the Visitor Center, Alternative 2 - Proposed Action.

### **Trails**

Because commercial use on trails would not be allowed, local users would most likely experience minimal changes in the level of use on popular trails in the Recreation Area. Trails would stay at their current Roaded Natural ROS class, where people could expect to meet up to twenty parties per day.

While there would not be guided hiking tours, levels of use on trails could increase by use from independent travelers or local users. Additionally, some visitors would not be able to participate in this type of recreation experience due to guided hiking tours not being offered.

Because commercial use on trails would not be allowed, there would be no opportunities for businesses offering outfitter/guide hiking tours in the Recreation Area. This would result decreased commercial opportunities for tour operators. There would be no new tax revenues or special use permit fees be generated.

### **Mendenhall Lake and Mendenhall River**

Under this alternative, visitors on the river could expect to have the moderate levels of interactions with other users, the same as the existing condition. Visitors on the lake could expect to have very low levels of interaction with other users on the lake, unless there is an increase in public use. There would be moderate levels of interactions with all users at the West Glacier Trailhead.

Effects would be similar to but less than Alternative 4. This alternative would decrease some visitors' sense of solitude on the Mendenhall River as current use levels would stay the same. Use levels on the river would be 25,700 or 210 visitors per day. For residents who live adjacent to the Recreation Area and along the river, their sense of solitude and privacy would be the same as the existing condition.

On Mendenhall Lake, existing commercial use levels are very low and visitors could expect to experience the same solitude as the existing condition. Some visitors' recreation experience may be enhanced due to low levels of use on the lake.

This alternative would not allow for growth in commercial use on Mendenhall Lake and Mendenhall River. This would result in the same level of business opportunities for commercial operators as currently exists. For commercial use on the river and lake there would no opportunities for commercial growth. Effects would be similar but less than Alternative 4.

Effects on additional tax revenues and special use permit fees generated would be less than Alternative 1 - No Action, and would be the same as described above for the Visitor Center.

Effects would be the same regarding competitive interest and prospectus and bid process as noted above for the Visitor Center, Alternative 2 - Proposed Action.

Visitors could expect the same type of visitor recreation experience that is currently being provided, with a moderate level of interactions between other users.

### **Recreation Area Overall**

This alternative would result in no increase of commercial use in the Recreation Area, and would have the least impact from commercial uses of all alternatives.

Under this alternative, commercial use levels would be the same as the existing condition and visitors could expect very low levels of use on Mendenhall Lake, moderate levels of use on the Mendenhall River, and high levels of use in the Visitor Center Unit.

Effects for commercial use criteria for issuing special use permits would be the same as Alternative 2 - Proposed Action.

No commercial developments, facilities, or concessions would be allowed. Effects would be the same as Alternative 1 - No Action.

Effects for special event special use permits would be the same as Alternative 2 - Proposed Action.

### **Alternative 6**

Under this alternative, proposed commercial use levels could be limited to 65% of capacity for the Visitor Center (both the existing and new facility) and on Mendenhall Lake and Mendenhall River, the same as Alternative 2 - Proposed Action. Commercial use allocation levels could be limited to 20% of capacity for East Glacier Trail and Nugget Creek Trail. Commercial use levels for West Glacier Trail could be limited to 20% of capacity, however, as a mitigation measure to reduce conflicts with local public users, hiking tours would only be allowed Monday through Friday; no hiking tours would be allowed on West Glacier Trail on the weekends. Additionally, there would be no commercial hiking tours or landings allowed at any time on the rock outcrop near the glacier.

These would be the only areas where commercial use could occur.

No commercial developments, facilities or concessions (except for a concession to operate Mendenhall Lake Campground) would be allowed. Effects would be the same as Alternative 1 - No Action.

### **Visitor Center**

Effects on visitor experience would be the same as Alternative 2 - Proposed Action.

Effects on commercial use would be the same as Alternative 2 - Proposed Action.

### **Trails**

In this alternative, outfitter/guide hiking could be allowed on the East Glacier Trail, Nugget Creek Trail, and West Glacier Trail. Effects on visitor experience would be similar to Alternatives 3 and 4, with the exception that tours would only be allowed on West Glacier Trail weekdays only and would be restricted to the trail; commercial use of the rock outcrop near the glacier would be prohibited.

For some visitors, not being able to access the glacier would diminish their recreation experience, while for other visitors, their recreation experience would be enhanced because of a greater level of solitude. Some visitors on tour would also not be able to go on a hiking tour on the West Glacier Trail if they are only in the area on the weekend. This would result in less guided hiking opportunities for those visitors. For other visitors, there would be a greater sense of solitude on the West Glacier Trail,

which would result in an increase of satisfaction of their recreation experience. Conflicts between non-tour visitors and tour visitors may also be reduced, as non-tour visitors would know ahead of time when to expect more visitors on the trail and could plan accordingly.

Effects on commercial use would be similar to Alternatives 3 and 4, except that limiting hiking tours to weekdays only on West Glacier Trail could reduce revenues for some commercial operators, as this results in an 88 day season instead of a 124 day season as was provided under Alternative 3. For special use permit holders offering tours on West Glacier Trail, this could result in decreased commercial use levels, resulting in lower revenues. Effects would be less than Alternative 1 - No Action, because this would mean reduced local and state tax revenues and lower special use permit fees generated.

Effects on commercial use of possible mitigation measures (requiring outfitter/guided tours on designated trails between 8 am - 6 pm only) could result in reduced opportunities for some commercial users. Ability to be able to offer tours to cruiseship passengers arriving late in the day or evening would also be reduced. For non-commercial users, these mitigation measures could increase their recreation experience on these trails, due to fewer encounters with large groups of people and a greater sense of solitude.

### **Mendenhall Lake and Mendenhall River**

Effects on visitor experience would be the same as Alternative 2 - Proposed Action except that visitors on lake tours would not be able to access the rock outcrop near the face of the glacier. For some visitors, this would diminish their recreation experience by reducing their opportunity to get out and explore near the glacier. For non-tour visitors, the increased sense of solitude near this area would enhance their recreation experience.

Effects on commercial use would be the same as Alternative 2 - Proposed Action.

Effects on commercial use from possible mitigation measures (requiring outfitter/guided tours on Mendenhall Lake and Mendenhall River from 8 am - 8 pm only) could result in reduced opportunities for some commercial users. Ability to be able to offer tours to cruiseship passengers arriving late in the day or evening would also be reduced. For non-commercial users, these mitigation measures could increase their recreation experience on the lake and river, due to fewer encounters with large groups of people and a greater sense of solitude.

### **Recreation Area Overall**

Under this alternative, low levels of use could be expected on Mendenhall Lake, moderate levels of use could be expected on the Mendenhall River and West Glacier Trailhead, and high levels of use would be expected in the Visitor Center Unit. East Glacier Trail and the West Glacier Trail would receive low to moderate levels of use and the Nugget Creek Trail would receive low levels of use.

Visitors would experience satisfaction with their recreation experience whether on a tour or as a non-tour visitor, as the area overall would still retain its "natural character". High quality recreation experiences would occur in an undeveloped setting.

## **E. Issue 4 - Access**

This issue reflects public concern that there are an inadequate number of access points into the Recreation Area. Some users want to increase search and rescue access to the Mendenhall River and also increase parking options along main travel routes. Some residents want to eliminate recreational access through residential areas.

## **Alternative 1 - No Action**

This alternative would continue access as it currently exists. There would be seven main access points (see Map 12). All trailheads and parking areas would be closed from midnight to 6:00 a.m. This alternative would continue to prohibit camping, late night parties, and vandalism at these sites.

Following is a discussion of each access point.

### **Mendenhall Glacier Visitor Center**

This parking area at the Visitor Center provides access to the Visitor Center Unit, the Mendenhall Lake Unit and the north end of the Dredge Lakes Unit.

This access would remain the same with the exception of an additional bus parking lot to be constructed with the Visitor Center expansion project.

With projected increased use, this parking area would continue to be crowded. Visitor experience would be impacted by crowding, lines at the facilities, and the noise associated with large crowds. Some visitors may not find parking spaces available.

### **Back Loop Bridge Trailhead**

This trailhead would remain the same with parking for approximately seven cars.

With projected increased use, this trailhead would continue to be crowded. Visitor experience would be impacted by crowding and lack of available parking and ORV unloading areas.

A request was made for a gated emergency vehicle access road where rescue agencies could access a put-in point on the Mendenhall River for launching rescue rafts. Under this alternative, this road would not be considered for construction. Emergency service to river users could continue to be delayed because of difficult access.

### **West Glacier Trailhead/Skater's Cabin**

West Glacier Trailhead would remain the same with parking for approximately fifteen passenger cars and two buses. Skater's Cabin would be improved with parking for approximately fourteen vehicles and the construction of a new two-unit toilet as funding became available.

No facilities would be considered for construction at the West Glacier Trailhead. The two portable toilets provided by the rafting company would remain. Visitors may use the surrounding area when these toilets were occupied. This would cause health and sanitary problems in the area.

Visitors would be impacted by the 25,700 persons per season who use the West Glacier Trailhead for a gear up and starting point to raft the Mendenhall River. Impacts of rafters, combined with the projected increase in other visitors, would cause crowding, excessive noise, and parking shortages. This would not be consistent with a Roaded Natural setting (ROS). The recreation experience may be diminished when the feeling for solitude is lost.

Other uses such as kayaking, wind surfing, skiing, and skating may continue to increase and add to crowding at these sites. This would further affect the visitors' experience.

Camping would only be allowed in Mendenhall Lake Campground. This would reduce impacts from people camping outside designated camping areas. Some visitors' recreation experience would be enhanced as they would experience greater solitude in the Recreation Area. This alternative would not allow opportunities for camping in more remote areas of the Recreation Area which may diminish some visitors' recreation experience (cross-country hikers traversing McGinnis Mountain, hunters).

**Dredge Lake Road Trailhead**

This site would remain undeveloped, with parking for four cars. No sanitary facilities would be provided.

Increased local use of the Dredge Lakes Unit would result in crowding for ORV parking and unloading ORVs. This crowding and associated noise, trash, and sanitary conditions would impact recreation experience of visitors.

Residents would continue to have local visitors traveling through residential streets to access the Dredge Lakes Unit. Impacts to residents would be noise and congestion from the additional traffic.

**Other Access Points**

Other access points could be considered for development on a case-by-case basis and would undergo site specific NEPA analysis. Effects would be increased access into the Recreation Area, which would benefit visitor's recreation experience. Impacts would be increased vehicle traffic and noise where new access points would be developed. This could impact nearby residents.

**Alternative 2 - Proposed Action**

Because ORV's would be prohibited on all trails in the Recreation Area, all of the trailheads would be less congested. There would not be vehicles with trailers associated with ORV use. This would provide less crowding at trailheads for visitors than Alternative 1 - No Action.

Trailheads and parking areas would be closed from midnight to 6:00 a.m. Camping would be prohibited except at Mendenhall Lake Campground. Late night parties and vandalism would decrease.

Following is a discussion of each access point.

**Mendenhall Glacier Visitor Center**

Same as Alternative 1 - No Action.

**Back Loop Bridge Trailhead**

This trailhead would be considered for reconstruction with parking to accommodate an additional five vehicles for a total of twelve vehicles, (including one parking site for buses). Considering projected use increase, the reconstruction of this trailhead could meet user demand. A vault toilet and dumpster pad could also be constructed. Visitor experience would not be impacted by crowding. Visitors would have easier access to the trails which originate at this trailhead.

A gated emergency vehicle access could be considered for construction to provide access to a put-in point on the Mendenhall River. Rescue agencies would be able to launch rafts quickly, increasing emergency services for river users.

**West Glacier Trailhead/Skater's Cabin**

Same as Alternative 1 - No Action.

Effects on camping would be the same as Alternative 1- No Action.

**Dredge Lake Road Trailhead**

This site would remain undeveloped, with parking for four vehicles. The effects would be the same as Alternative 1 - No Action.

Residents would continue to have local visitors traveling through their residential areas to access the Dredge Lakes Unit. Impacts to residents would be safety concerns, noise, and congestion from the

additional traffic. This alternative provides for the construction of two new trailheads, one at the Administrative Site and one on Glacier Spur Road. These new sites would allow greater overall access for the Recreation Area and lessen parking problems at other trailheads.

#### **Administrative Site Trailhead**

A new trailhead could be considered for construction at this site with parking for five to seven vehicles.

Parking at this location would lessen parking problems at the other trailheads. Visitors would experience less crowding than they do currently, particularly at the nearby Back Loop Bridge Trailhead.

#### **Glacier Spur Road Trailhead**

A new trailhead could be considered for construction at this site with parking for seven to twelve vehicles.

Parking at this location would lessen parking problems at the other trailheads. Visitors would experience less crowding, particularly at the nearby Visitor Center parking area. This new trailhead could be more convenient for users accessing the interior portion of the Recreation Area and could reduce impacts to residents on Dredge Lake Road.

Effects on other access points would be the same as Alternative 1 - No Action.

### **Alternative 3**

All access options described in Alternative 2 - Proposed Action would be the same in this alternative.

Boat users would be allowed vehicle access behind the gate now used by Alaska Travel Adventures at the West Glacier Trailhead. This alternative would allow additional boat and wind surfing access at West Glacier Trailhead. Access for these users is not currently available. This alternative could allow additional boat and wind surfing opportunities by allowing this access. Conflicts with commercial users may also occur due to increased numbers of users at this site.

Dispersed camping would be allowed 100 yards northwest of the West Glacier Trail but not on the lakeshore or the rock outcrop by the glacier. This would result in increased recreation opportunities for visitors wanting to camp in more remote areas of the Recreation Area. It would also facilitate cross-country travel for backpackers, climbers, hunters, and other users. Some visitors' recreation experience would be enhanced by being able to camp in a more remote, undeveloped setting where there would be higher levels of solitude than can be experienced in a developed campground setting. Some visitors' sense of solitude would be impacted by the increase of off trail use by people camping near West Glacier Trail. There would also be increased impacts from campers leaving fire rings, litter, and garbage in remote sites.

The effects of this alternative on other issues would be the same as Alternative 2 - Proposed Action.

#### **Other Access Points**

Under this alternative, easements for the City and Borough of Juneau could be considered, pending site specific NEPA analysis, for development of five maintenance and emergency vehicle turnarounds. The locations of these would be at the ends of Terrence Place, Dredge Lake Road, Gladstone Street (both ends), and Trafalger Avenue (see Map 7).

While these turnarounds would remain relatively undeveloped, with no parking for vehicles, residents could have visitors traveling through their residential streets to access the Recreation Area at these sites. Impacts to residents would be safety concerns, noise, and visibility of the additional traffic.

#### **Alternative 4**

All access options described in Alternative 2 - Proposed Action would be the same in this alternative.

Because ORV's would be allowed in a limited area under this alternative, the trailheads would be more congested. There would be vehicles with trailers associated with ORV use. This would provide visitors with more crowding at the trailheads than Alternatives 2 and 5 (which prohibit ORV use).

Effects on other access points would be the same as Alternative 1 - No Action.

Effects on camping would be the same as Alternative 1 - No Action.

#### **Alternative 5**

This alternative is similar to Alternative 2 - Proposed Action with the exception that the trailhead located at the end of Dredge Lake Road would be closed.

Residents would not have visitors traveling through residential neighborhoods to access the Dredge Lakes Unit. This would result in less impact to residents from the noise, visibility, and safety concerns associated with additional traffic. Noise, parties and vandalism would also be decreased due to the closure of the Dredge Lake Road Trailhead.

Trailheads could also be considered for construction at the Administrative Site and on Glacier Spur Road. These new sites would allow greater overall parking for the Recreation Area and could lessen parking problems at other trailheads.

This alternative would provide less trail access to the Recreation Area than Alternative 2 and Alternative 4 because of the closure of the Dredge Lake Road Trailhead. This alternative would provide greater access than Alternative 1 - No Action because of the construction of the two new trailheads at the Administrative Site and on Glacier Spur Road.

Effects on other access points would be the same as Alternative 1 - No Action.

Effects on camping would be the same as Alternative 1 - No Action.

#### **Alternative 6**

Effects on all access points would be the same as Alternative 3.

### **F. Issue 5 - Fish and Wildlife**

This issue reflects the public concern for protection of fish and wildlife habitat from recreational activities. The main impacts to fish and wildlife resources within the Recreation Area are human disturbance and physical habitat alteration resulting from facilities and trail development. The wildlife species of most concern include gulls, shorebirds, arctic terns, migratory songbirds, and anadromous fish.

#### **Common to All Alternatives**

Fish harassment (visitors wading in streams, disturbing, chasing or picking up fish, dogs running loose in streams and chasing fish, crowding too close to stream bank edge, and fish poaching) has been, and will continue to be, a concern at Steep Creek, the small stream between Moraine and Glacier Lake, and several of the streams in the Dredge Lake system. These impacts are likely reducing

the productivity of these systems. This equates to reduced sport and commercial fishing opportunities as well as wildlife viewing. Continued public education and a Forest Service presence will mitigate these problems.

Executive Order 12962 of June 7, 1995, directs federal agencies to conserve, restore, and enhance aquatic systems to provide for increased recreational fishing opportunities nationwide. Section 1 of the Executive Order directs federal agencies to evaluate effects on aquatic ecosystems and recreational fisheries, develop and encourage partnerships, promote restoration, and provide access and promote awareness of opportunities of recreational fishery resources. The Forest Service recognizes the recreation fishing opportunities contained in the Recreation Area and is committed to evaluation, restorations, and enhancement activities. All alternatives allow for continued development of recreational fishing opportunities. Impacts to fish habitat and fishing opportunities are discussed by alternative in the fishery sections.

All of the potential alternatives for the recreation plan revision would have the goal of managing the area in a near natural condition. There would be no impacts to the species that may use the area as a travel corridor or occasionally as foraging habitat during migrations. These species include the American peregrine falcon, marbled murrelet, and the Peale's peregrine falcon.

The nesting area for the northern goshawk will not be affected by any management options. Management options also should not impact the ability of these birds to use the entire area for foraging.

The harlequin ducks often nest in an area that receives considerable foot traffic. These ducks appear to successfully fledge young each year. The number of young fledged may be impacted by harassment from people as well as their dogs. New management direction, being proposed in the revision, would require all dogs be on a lease in this area and would also allow for the development of a fish viewing trail. This trail would concentrate the foot traffic in the area to an established trail. These two management objectives should result in less harassment of the harlequin broods, and possibly greater fledgling success.

### **Alternative 1 - No Action**

Alternative 1 would result in a continuation of management guidelines as presented in the 1975 Management Plan. This would result in a continued recreation use of the Dredge Lake Unit by ORV's and high density use of the Visitor Center, Mendenhall Lake Campground, and Skater's Cabin Units. Most of the impacts to fish and wildlife are associated with these visitor activities in these areas.

#### **Fish**

The sport fishing opportunities would continue to increase in this alternative as the Glacier and Moraine Lakes enhancement work begins to result in an increase in the cutthroat trout population. The sport fishing pressure in other areas of the Recreation Area would also continue to increase as result of Juneau's population growth and better public education about the opportunities in the area. Most of the sport fishing activities would continue to be focused on the fall coho run in the Holding Pond and Moose Lake.

Approximately 200 square yards (0.04 acres) of spawning habitat is being directly impacted by ORV's which are crossing spawning streams in the Dredge Lakes Unit. The vehicles are crossing these spawning habitats at a time when there are eggs or young fish still in the gravels. Because there is only approximately 1,400 square yards (0.28 acres) of spawning habitat available in the Dredge Lake Unit, this impact represents 14% of the available spawning habitat. These impacts are likely reducing the coho production of the area which impacts sport and commercial fishing opportunities.



### **Waterfowl**

Under this alternative, the greatest impact to waterfowl in the Recreation Area is probably harassment (running over nests, chasing birds, disturbance) during nesting and brood rearing. The extent of this impact is currently not known. It is known that some species are more sensitive than others and currently avoid nesting on the ponds which have the most human use. Red-throated loons, for example, do not nest on Moose Lake, Dredge Lake, or the Holding Pond. They have nested on the pond along the Moraine Ecology Trail and on Moraine and Glacier Lakes. One of these nests on Moraine Lake was unsuccessful, possibly due to human disturbance. It is likely that an increase in fishing pressure on these two lakes would eliminate them as red-throated loon nesting sites in the future. The small ponds north and to the west of Moraine Lake would remain relatively unused by people and therefore available to the waterfowl that are the most sensitive to human disturbance. In this alternative, eight ponds would continue to receive light human use and would be available to the more disturbance sensitive species.

### **Songbirds**

The greatest potential impact to the area's songbirds is probably direct habitat loss. Most of this impact is in the form of trails. Generally, the higher the trail density, the greater the negative impact on the songbird habitat. Certain species also tend to be habitat specialists. These species would be impacted more than those that use a wider range of habitat types. Examples of habitat specialists are the northern waterthrush and warbling vireo which are closely tied to the riparian habitats along the lakes and streams. The American redstart is considered rare in Southeast Alaska and in the Juneau area, and is only known to occur in the Sheep Creek Valley and in the Recreation Area. It is often found in the area between Norton Lake and Moose Lake. The abundance of willow, alder, and cottonwood in this area provides suitable habitat for this species.

Under this alternative, approximately thirty miles of trail in the Recreation Area would continue to exist. The Dredge Lakes Unit contains several miles of trail developed through ORV use. The ORV riders often maintain and sometimes add trails to the areas they frequently use. For this reason, the songbird habitat in this area is receiving the heaviest impact. This unit also includes three of the larger ponds and associated riparian habitats. Because there are no plans for new trails there, the area between Norton Lake and Moose Lake would not be impacted in this alternative (also see Issue 1 - Motorized Recreation Use).

### **Shorebirds**

Nest disturbance by human activity is the greatest impact to the area's shorebirds. Nest disturbance can lead to reduced nesting success rates. In this alternative, all of the approximately 140 acres of shorebird habitat could be disturbed by human activities. The degree of impact depends on the location (some areas receive more human use than others) and the species of shorebird as some species are more sensitive to disturbance than others. This alternative includes an area restriction for the area known as Tern Island. This restriction would provide shorebird nesting habitat protection for approximately two acres.

Currently, approximately 13.6 acres of nesting habitat are being directly impacted by ORV use along the south shore of Mendenhall Lake. This area is outside of the ORV use area, but still receives illegal use. It is likely that these impacts will continue under this alternative.

### **Arctic Terns**

Approximately 205 acres of shoreline habitat are available for tern nesting. They generally do not use the entire 205 acres in any one year. This habitat exists and they may nest anywhere suitable habitat is available. In this alternative, there would be a seasonal restriction on visitor use of the area known as Tern Island. Approximately two acres of habitat would be protected. Nesting terns in the remaining 203 acres of available habitat would likely be disturbed at various levels. This would result in a reduced nesting success for the Mendenhall arctic terns.

### **Gulls**

A small gull colony exists on the rock face to the west of the Mendenhall Glacier. Because the gull colony is unique to the area, it is a valuable resource. The gulls are using approximately thirty acres of this rock outcrop. This area is accessible to humans from non-designated spur trails from the West Glacier Trail. This alternative does not provide area restrictions that would help protect this colony. Gulls are sensitive to disturbance. Heavy human activity near the face of this outcrop, during the nesting season, could result in lower productivity and abandonment of this colony over time. Currently, few people venture close enough to the birds to cause a problem. Under this alternative, if use patterns on the West Glacier Trail change or for some reason a group of people start frequenting the area, the gull colony could be severely impacted.

### **Mammals**

Currently, most of the mammal species that use the Recreation Area are relatively tolerant of human activities. The patterns of black bears that use the Recreation Area are probably influenced by the human use patterns. Like most Juneau bears, those that frequent the Recreation Area adapt their use patterns to take advantage of the area's resources while avoiding most human contact. This alternative would not result in a reduction of bear use of the area.

In the winter months wolves are known to use the lower reaches of the Nugget Creek drainage and possibly the lake and lake shore areas. The amount of this use is probably dependent on the area wolf densities and the severity of the weather. It is probable that human use of the lake and the surrounding areas reduces the amount of use these areas receive by local wolves.

Sitka black-tailed deer also appear to be using the Recreation Area more frequently in recent years. This increased use could be explained by an increase in habitat value to deer as the area's plants continue to develop toward a mature spruce/hemlock forest type. It could also be explained by increases in deer densities in the surrounding areas. It is likely that deer in the Recreation Area are impacted by human use of the area. Deer use of areas like the Visitor Center Unit and the Dredge Lakes Unit would likely never reach the capability of the habitat to support deer due to the high level of human use these areas receive.

## **Alternative 2 - Proposed Action**

This alternative would result in the elimination of firearm use in the entire Recreation Area as well as closing the entire area to ORV's. It would also result in additional access opportunities to the Recreation Area. This alternative would call for the implementation of protective measures, as needed, to protect sensitive wildlife areas.

### **Fish**

Sport fishing opportunities would be the same in this alternative as in Alternative 1 - No Action.

Alternative 2 may result in a decrease in the amount of fish harassment (as described in Alternative 1 - No Action) through a more proactive, protective management approach. Under this alternative, areas that show sign of impact could receive additional protection. This could result in area closures, signing, fencing, and trail construction. These protective measures could result in an increase in the fish production within the Recreation Area.

The annual impact to 200 square yards (0.04 acres) of spawning habitat by ORV's would be reduced or eliminated in this alternative. This would result in increased fish production which would have greatest benefits to the local coho salmon population and fishery.

### **Waterfowl**

Most of the impacts to waterfowl are related to human disturbance. Human disturbance during nesting can result in lower nesting success and, therefore, lower production. By eliminating the ORV

traffic in the Dredge Lakes Unit, impacts to waterfowl may be reduced. On the other hand, if ORV's are eliminated, the area may start to receive more foot traffic. This could cause an increase in exposure to disturbance. If this alternative were implemented, and ORV's were eliminated, many trails in the area would become impassable as they become overgrown with vegetation. Only the trails designated as trails by the Forest Service, and put on a maintenance schedule, would remain open. This could mitigate impacts to waterfowl which might otherwise be caused by an increase in foot traffic. For these reasons, it is unknown whether eliminating ORV's will have a negative or positive impact on nesting waterfowl.

### **Songbirds**

Under this alternative, non-maintained trails would likely become overgrown and the miles of trail in the Recreation Area would eventually be reduced to the thirty miles maintained by the Forest Service. This would result in additional habitat for songbirds which could lead to increases in some populations.

The area between Norton and Moose Lakes would not be impacted in this alternative.

### **Shorebirds**

Management direction, as stated in Alternative 2, would be to provide additional protection to areas that are being impacted. This could result in near complete elimination of impacts to nesting shorebirds through monitoring and seasonal area closures. This could eliminate impacts to the approximately 140 acres of potential habitat which may result in improved nesting success.

The 13.6 acres of nesting habitat along the south shore of Mendenhall Lake that is currently being impacted by ORV use would likely be reduced in this alternative. Because this alternative would prohibit ORV's throughout the Recreation Area, it is likely that there would be less illegal use along the lake shore.

### **Arctic Terns**

For the same reasons as discussed for shorebirds the impacts to nesting terns could be significantly reduced. The same actions that would protect shorebird habitat would also protect most of the tern nesting habitat which may result in improved nesting success.

### **Gulls**

Following the same management direction as discussed for shorebirds and Arctic terns, the gull colony could be protected if impacts become apparent. Those actions may result in improved nesting success.

### **Mammals**

The impacts to the area's mammals would probably be similar to Alternative 1. The heaviest used areas would be the same in both alternatives. With or without ORV traffic, the area around Dredge Lake and Moose Lake would still receive heavy use. The effects would be the same as described in Alternative 1 - No Action.

## **Alternative 3**

This alternative would allow firearm use similar to Alternative 1 - No Action. It would allow ORV use on designated loop trails only and require ORV operators to obtain a permit. These loop trails would be approximately 2.5 miles in length. This alternative would also result in additional access opportunities to the Recreation Area. This alternative would require the implementation of protective measures, as needed, to protect sensitive wildlife areas.

### **Fish**

Sport fishing opportunities would be the same in this alternative as in Alternatives 1 and 2. The Holding Pond and Moose Lake may receive additional use due to ORV's being prohibited around the Holding Pond and the west side of Moose Lake. This could result in greater sport fishing opportunities plus increased fishing pressure in these areas.

Harassment (chasing fish, disturbance of fish in streams) and direct habitat impacts, as related to ORV's crossing stream habitats, would be the same as Alternative 2 - Proposed Action as new ORV trails would not cross the streams.

### **Waterfowl**

The new ORV trail would likely run close to a pond on the west side of the Dredge Lakes Unit. This pond currently receives little recreational use. Having the trail in proximity to the pond would likely result in increased human use of the pond. This could impact waterfowl species that are sensitive to human disturbance. This would result in a loss of one pond where waterfowl that are sensitive to disturbance would be able to nest. Other impacts would be the same as described in Alternative 2.

### **Songbirds**

Currently, there are approximately ten miles of undeveloped trails in the Recreation Area that have been created by ORV use. These trails represent direct habitat loss to songbirds. Under this alternative, approximately three miles of trail would be designated for ORV use. Because ORV's would be confined to designated trails, approximately seven miles of unmaintained trails would grow over. This alternative would result in more habitat available to songbirds than Alternative 1 - No Action, and slightly less than Alternative 2 - Proposed Action. The amount of habitat available may be directly related to bird populations.

The area between Norton Lake and Moose Lake would have an ORV trail running through it. This may result in an additional impact to the American redstarts and other species that use this area.

### **Shorebirds and Arctic Terns**

Motorized boats may cause disturbance to nesting terns and shorebirds through noise, physical presence, and boat wakes. This disturbance could result in a decrease in nesting success.

Impacts to nesting habitat by ORV's would likely be similar to Alternative 1 - No Action. Illegal use along the lake shore would probably continue if a legal area was provided in the Recreation Area.

### **Gulls**

Except for the potential impact of motorized boats, the impacts of this alternative are similar to those described in Alternative 2 - Proposed Action. Motorized boats operated near the gull colony could result in reduced nesting success.

### **Mammals**

Additional impacts to mammals may result from opening up areas that are now relatively remote and undisturbed. The proposed ORV trail would be constructed through thickly forested areas that currently have little trailing. Bringing trail developments into an undeveloped area may displace bears and could result in a decrease in the numbers of bears utilizing the area.

## **Alternative 4**

This alternative would allow ORV use similar to Alternative 1 - No Action. The difference is the area open to ORV's would be moved away from Dredge Lake and the west side of Moose Lake. It would also result in additional access development. In addition to having management direction to monitor and protect sensitive wildlife habitats, it would close the west side of Mendenhall Lake to foot traffic

from May 15 through July 15 to protect nesting terns and close the rock peninsula on the west side of the lake to foot traffic to protect the gull colony.

**Fish**

The impacts of this alternative would be similar to those described in Alternative 3.

**Waterfowl**

The impacts of this alternative would be similar to those described in Alternative 1 - No Action.

**Songbirds**

The impacts of this alternative would be similar to those described in Alternative 1 - No Action.

**Shorebirds, Arctic Terns, and Gulls**

The west shore of Mendenhall Lake, including the rock peninsula, would be closed to foot traffic from May 15 through July 15. This would protect the entire gull colony, approximately fifty acres of the important shorebird nesting area, and approximately 100 acres of the important tern nesting area. There would also be management direction to provide additional protection to areas that are being impacted. This may apply to other lake shore areas if problems with nest disturbance persist. This alternative provides more protection for wildlife species than Alternatives 1, 2, and 3. These measures should improve nesting success for gulls, terns, and shorebirds.

Impacts to nesting areas along the southern lake shore would likely be similar to Alternative 1 - No Action and Alternative 3.

**Mammals**

The impacts of this alternative would be similar to those described in Alternative 1 - No Action.

**Alternative 5**

This alternative would prohibit ORV use in the entire Recreation Area. It would also prohibit foot traffic along the south and west shores of Mendenhall Lake from May 15 through July 15.

**Fish**

The impacts of this alternative are similar to those described in Alternative 2 - Proposed Action.

**Waterfowl**

The impacts of this alternative are similar to those described in Alternative 2 - Proposed Action.

**Songbirds**

The impacts of this alternative are similar to those described in Alternative 2 - Proposed Action.

**Shorebirds, Arctic Terns, and Gulls**

In addition to the protection measures described in Alternative 4, this alternative would prohibit foot traffic on the south shore of Mendenhall Lake. This would protect an additional fifty acres of shorebird and Arctic tern nesting habitat. There would also be management direction to provide additional protection to impacted areas. This may apply to other lake shore areas if problems with nest disturbance persist. This alternative would provide the most protection for nesting birds. It may result in the highest nesting success for gulls, terns, and shorebirds of all the alternatives.

Impacts to nesting habitat along the south shore of Mendenhall Lake would be reduced from the current situation as there will likely be less illegal ORV use in this area. Impacts to these areas will be similar to Alternative 2 - Proposed Action.

#### **Mammals**

The impacts of this alternative are similar to those described in Alternative 2 - Proposed Action.

### **Alternative 6**

This alternative would prohibit ORV use in the entire Recreation Area except for during the winter months on Mendenhall Lake. It would also require that all dogs be on-leash when being walked on the west and south shorelines of Mendenhall Lake between April 15 and July 15.

#### **Fish**

The impacts would be similar to those described in Alternative 2- Proposed Action.

#### **Waterfowl**

The impacts would be similar to those described in Alternative 2 - Proposed Action.

#### **Songbirds**

The impacts would be similar to those described in Alternative 2 - Proposed Action.

#### **Shorebirds, Arctic Terns, and Gulls**

In the alternative, there would be no areas which have "no foot traffic" restrictions. A large part of the habitat disturbance that is currently taking place is being caused by illegal ORV use. In this alternative, the amount of illegal ORV use along the lakeshore will be significantly reduced. This, along with the requirement that all dogs be on-leash when on the south and east shore of Mendenhall Lake should result in an increase in the nesting success of the shorebirds that nest along the lake.

Protection measures for the arctic terns include the same as for shorebirds. Mitigation includes public education and, when possible, monitoring of individual nest sites which could be marked and protected by the Visitor Center interpretive staff. These measures should result in an increase in nesting success for arctic terns.

The main threat to the gull colony is human intrusion into the colony and the water below the colony. Mitigation measures under this alternative that would help protect the colony include permit stipulations for all commercial users that restrict them from areas that would disturb the gulls as well as education efforts that would focus on protection of the gull colony. If these mitigation measures are successful, the nesting success would not be reduced by human disturbance. If any or all of these protection measures are not effective at reducing the disturbance of the various species that nest along Mendenhall Lake, then areas could be closed to all human use during critical times to protect these birds. Any such closure should improve nesting success.

#### **Mammals**

The impacts would be similar to those described in Alternative 2 - Proposed Action.

## **G. Other Resources**

### **Cultural and Historic Resources**

The preservation and protection of the Recreation Area's cultural and historic resources are both closely associated with the location of the resource, the nature of the management activity, and the environmental characteristics where management activities occur. Impacts to these resources may occur from natural forces, from public access, or from project-related activities.

Erosion and other environmental effects may deteriorate cultural resource sites through decomposition. Public use may destroy cultural resource sites through inadvertant damage caused by compac-

tion, or other ground disturbing activities. Vandalism, including relic collecting, defacement, and theft results in loss of information and destruction of the resource. Protection of significant cultural resource sites from public use includes the establishment of public education programs, maintaining confidentiality about specific-site locations, monitoring, and directing public use from the most vulnerable sites.

In all alternatives, the preferred management of sites with cultural and historic resources will be inventory, protection, preservation, and interpretation of these areas. Potential adverse effects from environmental modifications or management activities will be avoided or mitigated.

### **Wetlands and Floodplains**

In all of the proposed alternatives, human activities may occur within wetlands and floodplains. These include recreational activities as well as development projects involving construction. Executive Orders 11988 and 11990 provide management direction to the Forest Service for activities occurring on floodplains and wetlands. The goal of Executive Order 11990 is to avoid, to the extent possible, the long and short term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative. The goal of Executive Order 11988 is to avoid, to the extent possible, the long and short term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative. The Forest Service will fully implement these Executive Orders in the management of the Recreation Area, no matter which alternative is chosen. The potential impacts and mitigation measures associated with future development within the Recreation Area will be analyzed in separate project-specific NEPA documents.

Best Management Practices (BMP's), described in Forest Service Handbook 2509.22, Soil and Water Conservation Handbook, will be implemented for all projects that have the potential to impact water quality or influence aquatic habitat. These BMP's are designed to reduce potential impacts.

### **Vegetation**

#### **Common to All Alternatives**

The vegetation most sensitive to disturbance are the early successional lichens and forbs as well as some of the wetland assemblages. These habitats are important nesting and feeding areas for a number of bird species, particularly shorebirds and some passerines. Most of these types of habitat are found along the broad south and east shore of the Mendenhall Lake.

The largest impact to the vegetation in these areas is the loss of vegetation through indiscriminate trails. This trailing can be caused by foot, bicycle, or ORV traffic. Currently the largest impacts (vegetation removal and loss, soil compaction, erosion) are being caused by ORV use. The amount of disturbance has not been quantified, but it appears that the area of disturbance has gotten larger in the last five years. Even though the south shore of the lake is closed to ORV use, many riders ignore the restriction.

Because the main visitor concentration areas would be the same for each alternative, the amount of new trails caused by foot or bicycle traffic would not differ between alternatives. These impacts could be mitigated in all alternatives by providing signing and education regarding staying on designated trails.

## **Alternatives 1, 3, and 4**

Past experience with managing ORV's in the Recreation Area has shown that complete compliance with ORV regulations is probably not an attainable goal. It is likely that there would be less illegal use along the shoreline areas if the entire Recreation Area were closed to ORV's than if areas were open. For this reason, Alternatives 1, 3, and 4 would likely result in similar levels of impacts to the vegetation along the lakeshore areas as currently exists. Presently, approximately 13.6 acres of the short forbs and lichen flats are being disturbed along the south shore of the lake. These areas are in habitats for shorebird nesting.

## **Alternatives 2, 5, and 6**

Because these alternatives do not allow summer ORV use in the Recreation Area, it is likely that there would be less illegal ORV use along the lakeshore areas. This would result in less vegetation disturbances in the sensitive areas.

## **H. Subsistence**

Because there is no known subsistence use of the Recreation Area, and because none of the alternatives would eliminate potential subsistence resource, the Forest Service concludes that the revision of the Management Plan will not have an impact on subsistence opportunities in the area.

## **I. Cumulative Effects**

### **New Facilities Improvements in Progress**

There are a number of planned improvements in the Recreation Area that have already undergone public involvement and the NEPA process. These projects have been approved, and will begin in the next few years, funding dependent. They include:

- construction of the Steep Creek Fish Viewing Interpretive Trail which will include approximately 0.25 miles of accessible trail with observation platforms (Forest Service, 1992b). Planned implementation date: 1996 or 1997.
- expansion/improvements to Visitor Center, adding approximately 5,500 square feet to existing building and increasing design capacity to 696 people at one time; with Steep Creek Fish Viewing Trail, design capacity at Visitor Center site will be 896 people at one time (Forest Service, 1992b, 1994). Planned implementation dates: 1997 for Visitor Center; 1996 or 1997 for Steep Creek Fish Viewing Trail.
- improvements to the Visitor Center sewage/utility systems which will involve a hookup to the city sewer system (Forest Service, 1994). Planned implementation date: 1996.
- reconstruction of Photo Point Trail to a fully accessible trail (Forest Service, 1994). Planned implementation date: 1996.
- reconstruction of East Glacier Trail. Planned implementation date: new stairs, 1996; trail 1997 or 1998.



- reconstruction and renovation of Mendenhall Lake Campground which will result in several upgrades including; city sewer and water, a new group shelter, and new campsites (Forest Service, 1993b). Planned implementation date: 1997 or 1998.
- construction of shoreline loop trail/interpretive trails at Mendenhall Lake Campground (Forest Service, 1993b). Planned implementation date: 1997 or 1998.
- renovation of the Skater's Cabin site and trails; shoreline armoring (Forest Service, 1993b). Planned implementation date: 1998.

These improvements would protect existing facilities from further deterioration and alleviate crowding. Implementation of any of the alternatives in the EIS would not negatively affect these projects nor cause any adverse cumulative effects.

The Forest Service has received 22.5 acres of land at the Administrative Site (old FAA site) from the Bureau of Land Management. This land is withdrawn from public appropriation for administrative use. The National Oceanic and Atmospheric Administration has requested permission to build an office complex for the National Weather Service on this piece of land.

This proposed complex would consist of a 6,000 square foot building, a 27 vehicle parking area, and an emergency generator building, occupying approximately three acres. The Forest Service is in the process of preparing a NEPA document for this proposal. This NEPA document is currently in the scoping phase.

As proposed, the complex would be at least fifty feet outside the boundary of the Recreation Area. It would be between the proposed parking area for the Administrative Site, as described in Alternatives 2, 3, 4, and 6, and the Recreation Area boundary. The effects to the Recreation Area would be negligible because it is outside the boundary and would not be seen from within the Recreation Area due to the dense vegetation. The biggest impact would be to people parking at the the new trailhead if constructed, and walking to and from the boundary. They would see an office and parking area instead of vegetation.

### **J. Irreversible and Irretrievable Commitment of Resources**

An irreversible commitment of resources is defined as the loss of future options. It applies primarily to non-renewable resources, such as minerals or cultural resources, and to those factors which are renewable only over long time spans, such as soil productivity.

Irretrievable commitments represent the loss of production, harvest or use of renewable resources. These opportunities are foregone for the period of the proposed action, during which other resource utilization cannot be realized. These decisions are reversible, but the utilization opportunities foregone are irretrievable.

With approval of the 1996 Mendenhall Glacier Recreation Area Management Plan, there would not be a foreseeable or predicted irreversible or irretrievable commitment of resources.

# **Chapter 5**

## **List of Preparers**

The following are individuals on the Forest Service interdisciplinary team (IDT) who were responsible for the preparation of this environmental impact statement.

<b>Joni Packard</b>	<b>Team Leader. B.A. in Zoology from University of Washington, Seattle with undergraduate work in wildlife management, fisheries, botany, and natural resource management. Ten years experience with the Forest Service and National Marine Fisheries Service.</b>
<b>Roger Birk</b>	<b>B.S. in Natural Resource Management from Lincoln University, Missouri. Eighteen years experience with the Forest Service and Bureau of Land Management.</b>
<b>Janis Burns</b>	<b>B.S. in Forestry from the University of Illinois. Eighteen years experience in leadership, preparing EIS's (NEPA Planning), and timber management.</b>
<b>John Favro</b>	<b>B.S. in Philosophy and Psychology from California State University, Fresno; undergraduate course work in Natural Resource Management to meet USDA Forest Service Professional Forester Requirements from California Polytechnical University in San Luis Obispo, California. Twenty-two years experience with the Forest Service in recreation management, timber management, and fire management.</b>
<b>Don Martin</b>	<b>B.S. in Wildlife Management from the University of Idaho, M.S. in Fisheries Resources from the University of Alaska, Fairbanks. Six years experience with the Forest Service.</b>
<b>Karen Theurer-Pinkerton</b>	<b>B.S. in Forestry Recreation from the University of Wisconsin, Stevens Point. Eight years experience with the Forest Service in fire, timber, and recreation.</b>

# **Appendix A**

## **FEIS Response to Public Comments**



Mark R. McCaughan, M.D.

Diplomate,  
American Board  
Of  
Urology

3227 Glacier Highway  
Juneau, Alaska 99801

(907) 588-5856  
Fax (907) 588-6061

JUNEAU  
RANGER DISTRICT

OCT 13 '95

RICT RANGER \_\_\_\_\_  
PUTY RANGER \_\_\_\_\_  
M \_\_\_\_\_  
C/LANDS \_\_\_\_\_  
W \_\_\_\_\_  
C PLANNER \_\_\_\_\_  
VIS \_\_\_\_\_  
S \_\_\_\_\_  
S \_\_\_\_\_

October 10, 1995

Joni Packard  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, Alaska 99801

Dear Ms. Packard:

Thank you for your indulgence in discussing the recent Mendenhall Glacier Recreation Management Plan revisions.

1.1 I emphatically believe that the Forest Service original alternative is my preference. I understand that as a result primarily of the off road vehicle enthusiasts, it appears that alternative #4 is now being considered in lieu of the original preferred alternative. It is comforting to note that in alternative #4 the off road vehicle area has been restricted with plans to enforce the proposed boundaries. If this is, indeed, achieved, it would be a marked improvement over the current situation.

1.2 I am concerned, however, that river traffic is being increased from 25,700 to 39,530. I understand that river traffic is considered to be a low impact activity. However, as you noted, it is certainly not a wilderness experience for the rafters and it greatly detracts from the privacy of those Juneau residents living along the river. There is nearly a continuous stream of rafts as it is, and a 55% increase, in my opinion, would be an extremely noticeable increase. I would predict that you will receive letters other than this expressing concern.

1.3 As we discussed, one of the more noticeable negative effects of off road vehicles is the noise. I have researched the noise levels associated with 4 wheel drive, 4 wheeled vehicular traffic and believe that the highest noise level output is 95 decibels. This is considerably less than the 2 wheeled motocross type vehicles which have an extremely high pitch and very objectionable noise level output. I have repeatedly called the police dispatcher complaining of these type vehicles utilizing the current out-of-bounds areas late into the night and believe that the new area should be restricted to 95 decibels or less. I will predict that you will have far fewer complaints utilizing this noise level maximum than if you allow the 2 wheeled versions which sound like enhanced chainsaws.

Thank you for your efforts to date and thank you for your consideration of these concerns.

Sincerely,

Mark R. McCaughan

MRM/rrk

1.1

Please see the Record of Decision, ORV use is prohibited except on the West side of Mendenhall Lake when it is frozen. This should eliminate most ORV noise originating from the Mendenhall Glacier Recreation Area as well as ORV resource problems. See the Record of Decision, Description of the Forest Service selected alternative and Rationale for the Decision, Chapter 2, Alternative 6; Chapter 4, Issue 1, Alternative 6, and the Recreation Area

1.2

Commercial use levels on Mendenhall River have been calculated to reflect public concerns, and to meet the desired future condition for a semi-primitive motorized recreation opportunity. To ensure that there is not a continuous flow of rafts on the river, mitigation measures will include group size/requirements and a maximum of 4 trips per day in the special use permit stipulations.

1.3

Please refer to response 1.1 and 3.3.

OCT 13 '95

To: Karen Mollander  
District F.S. Ranger, Chatham Area  
8465 Old Dairy Rd., Juneau, Ak.

From: Susan Arthur  
PO Box 32662  
Juneau, Ak. 99803

Date: October 12, 1995

Subject: Comments, Mendenhall Glacier Recreation Area Management Plan  
Revision Draft EIS

DISTRICT RANGER  
DEPUTY RANGER  
T/M  
REC/LANDS  
F&W  
RMA  
MGT PLANNER  
VIS  
ENGINEER  
SCIL & WATER

F.S. Area Management Objectives

Objective #5, pg. 8, of Overall Management Direction

Your stated objective, Alternative 4: "To prohibit discharge of firearms, pellet guns, pellet paint guns, and BB guns in the Recreation Area except for McGinnis Mountain Unit, where shotgun and rim-fire .22 caliber rifle would be allowed. Allow archery in the McGinnis Mountain Unit."

2.1 The public has several alternatives to choose from, even though the Forest Service, at this point, favors the above. I favor Alternative 3 which would continue to allow shotgun hunting in Mt. McGinnis and Dredge Lakes Units during waterfowl, snowshoe hare, ptarmigan and grouse seasons. This alternative needs an amendment, however, allowing use of .22 rimfire rifles in the Mt. McGinnis unit.

Ms. Packard stated on the phone that there is only a 58 acre donut hole of hunting area left in the Dredge Lakes area, so why keep that - why not just do away with it altogether since existing laws have so restricted it. I say, since there is so little open now, do all we can to keep that, not take it away! She also said that the majority of the comments were against hunting in the Dredge Lakes Unit. We need to think about the silent majority of hunters here. Many young people do use this area. Unfortunately they do not read EIS's nor speak up for themselves. Also, unfortunately, many sportsmen don't speak up until it's too late.

You had only 138 comments and 3 petitions at the end of your last scoping period (fewer on the earlier one). I'm sure a lot of these comments addressed other subjects, such as ATV use, so you have heard from a very small segment of the hunting public.

Some of the reasons for maintaining use of firearms in the Mendenhall Recreation Area:

2.2 Hunting has been compatible with other uses. The M.R.A. is a multi-use recreational area. Hunting is and has been an important recreational use there for many years, without injuries or accidents.

2.3 Hunting, nationwide, is constantly being attacked by non-hunters. One of Alaska's renowned recreational attributes is the sport of hunting. Managers of these lands should strive toward continuing hunting opportunities, not reducing them.

2.4 Hunters of all ages, esp. young people, use this area. It is one of very few waterfowl hunting areas that can be reached without aid of a boat. Young people often bike or walk there with their shotguns. They enjoy the opportunity whether or not they get a duck. They are getting good, outside exercise.

2.1

Alternative Six was developed in response to public comments on the Draft EIS. In this alternative Mt. McGinnis Unit will be open to hunting with shotguns and .22 caliber rifles. The Dredge Lakes unit will be open to hunting with shotguns during waterfowl season. Please also see Chapter 4, Issue 2 for analysis of effects.

2.2

Please refer to response 2.1., and Chapter 4, Issue 2 - Firearm Use.

2.3

Please refer to response 2.1.

2.4

Please refer to responses 2.1 and Chapter 4, Issue 2 - Firearm use.

2.5

Please refer to response 2.2.

2.6

Thank you for your comment.

2.7

The purpose of this Management Plan is to provide management direction for Recreation Area as well as list (but not evaluate) potential projects that could take place in the future. Construction of a footbridge over the Mendenhall River will require separate public involvement and site specific environmental analysis. The decision whether or not to actually construct footbridge will be made at some future time. We encourage you to stay involved and to let us know your thoughts again when we begin that public process.

2.8

Please refer to response 2.7. The West Glacier trailhead proposal, is the situation as the proposed footbridge. Each specific project mentioned in appendix 3 to the Mendenhall Glacier Recreation Area Management Plan, will require site specific analysis, and include more public participation.

2.9

Please refer to response 1.2.

2.10

The West Glacier Trail bench/overlook is an approved project, that prior to this plan went through public involvement and a NEPA decision. One of the problems that frequently occurs for hikers unfamiliar with this trail, is that they do not know they have reached the end of the trail and end up bushwacking in unfamiliar and rugged terrain. The bench was a challenge cost share project done with local partners.

2.11

Brushing the West Glacier Trail for more scenic views is within the purview of this decision and will be considered in future trail maintenance.

Those who go out there are not sitting in a mall or hamburger shop wondering what to do. Hunting teaches them to be independent and resourceful.

2.5

Other users of the area should have no problem interacting with hunters as 95% of the time hunters are out in the field early, and are then gone, before hikers even get out. Hunters frequently go out, regardless of inclement weather, when other user groups prefer to stay in.

Out of a twelve month period, waterfowlers may use the area only a three and a half month period. In actuality they will use it only from Sept. 1 through about the end of October.

#### West Lakeshore Unit

##### Action #7

2.6

I support your clarification that leashes for dogs w/in the campground are not mandatory after the campground is closed. It is a great place for dogs to stretch their legs!

##### Action #9

2.7

I continue to oppose the construction of a footbridge over Mendenhall River to connect the Dredge Lakes Unit. When the river is high, quite large icebergs come out from the lake. The bridge could be washed out or knocked out unless it was very high and wide. Why go to such expense when people can now easily drive and/or walk to all these places. The majority will want to drive to the glacier. And who at the glacier would want to walk from there to see the campground? Also, in keeping with Action #11, developing watchable wildlife opportunities, building a bridge and increasing foot traffic will not develop wildlife watching opportunities, no matter how many interpretive signs you put up.

##### Action #12

2.8

The West Glacier Trail head needs no "improving" - you do not have to put up concrete, multiple signs, chairs, paving, etc. It is very attractive now; just natural dirt path amidst trees and brush.

##### Action #14

2.9

I agree the river floater/visitor capacity should have a limit, but not only for better visitor experience. We locals who live along the river do enjoy occasionally looking out our windows and not seeing boat loads of tourists.

#### McGinnis Mountain Unit

##### Action #1

2.10

I want to reiterate that it will not improve the trail terminus of the West Glacier Trail if you "develop a vista/viewpoint overlook". To put in man-made, artificial structures there would only detract from that already incredibly beautiful, natural spot.

2.11

Something that would enhance enjoyment of some of the most scenic viewpoints along the West Glacier Trail would be to have your F.S. trail crew thin and/or top some of the brush (alder, willow, devils' club, etc) on the scenic sides of the trail. In the natural succession of plant growth, so many of the special views are now hidden from trail viewing.

BRUCE H. BAKER

OCT 20 '95

P.O. Box 211384  
Auke Bay, Alaska 99821-1384

DISTRICT RANGER \_\_\_\_\_  
DEPUTY RANGER VB  
T/M CB  
REC/LANDS October 17, 1995  
F&W pm  
BM \_\_\_\_\_  
MOTV PLANNER \_\_\_\_\_  
VIS \_\_\_\_\_  
ENGINEER \_\_\_\_\_  
SOCIAL WELFARE \_\_\_\_\_

Ms. Karen Mollander, District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, Alaska 99801

Dear Ms. Mollander:

Thank you for the opportunity to comment on your DEIS for revision of the 1975 Mendenhall Glacier Recreation Area Management Plan. I hope that the following comments are useful.

My family and I have been frequent users of the Mendenhall Glacier Recreation Area for 25 years, and I urge you to adopt Alternative 5 as your decision.

3.1

It is obvious from the use conflicts that have prompted you to revise the Mendenhall recreation area plan that while Juneau's continuous human population growth has stimulated short-term monetary gain, it has also created intense competition for the very outdoor recreation opportunities which attracted many of us to this community in the first place. You are in a unique position to identify and establish sustainable limits on what the Mendenhall Glacier Recreation Area can accommodate in the way of compatible uses. In so doing, you will send a clear message to the rest of us in the borough as to what the resource base can support, rather than having the rest of us tell you how many more people and uses the area must accommodate, regardless of its carrying capacity.

#### Procedural Comment

3.2

It is unclear from the DEIS which alternative you are leaning toward. Your October 2 cover letter and pages i through 36 and page 2-18 of the DEIS say that the Forest Service preferred alternative is Alternative 4, yet the DEIS also features Alternative 2 as the agency's "proposed action." When I called a Forest Service office for an explanation, the confusion seemed to stem from an interpretation of the National Environmental Policy Act (NEPA), and it still wasn't clear which of these two alternatives one should focus their comments on. I suggest that to avoid confusion in future EISs, the Forest Service feature either a preferred or a proposed alternative but not both.

#### Comments Regarding Alternative 5

3.3

1. Motorized Recreation Vehicle Use. Snowmachines, other ORVs, and motorized watercraft adversely affect non-motorized users more than non-motorized users adversely affect motorized

3.1

Thank you for your comment.

3.2

A proposed action is a proposal by the Forest Service that we agree to move forward with. In this case it was the 1995 Mendenhall Glacier Recreation Area Draft Management Plan. This is the proposal that we presented to the public for scoping. The purpose of scoping is for the public to review the proposed action and identify the issues they feel should be addressed in the EIS. We then develop alternatives to the proposed action that will address those issues. NEPA requires us to analyze the proposed action, the no action alternative (existing direction), and a reasonable range of alternatives.

NEPA also requires us to identify our preferred alternative at the DEIS stage. The preferred alternative is the alternative that the decision maker proposes to select for implementation. This could be the proposed action or one of the other alternatives, including the no action alternative. The preferred alternative chosen in the record of decision may be different than the one identified in the DEIS. In this case, Alternative 4 was identified in the DEIS as the preferred. However, a new alternative has been added to the FEIS and has been selected in the Record of Decision, which is Alternative 6. Based on public responses, any of these alternatives, or a combination of the alternatives, may be selected for implementation in the Record of Decision.

vehicle users. The noise of fast-moving snow machines, other ORVs, and motorized watercraft breaks the quiet and solitude that pedestrians and paddlers are out on the ice, the water, or the trails to enjoy. Relatively slow-moving and self-propelled travelers do not have that effect on motorized users. Snowmachines, other ORVs, and motorized watercraft can also create serious safety hazards for pedestrians and paddlers. With all three of these, there is the threat of collisions. In the winter, motorized vehicles on Mendenhall Lake also create ruts in the snow or slush cover. With the passage of time, these ruts become hardened into ice, thereby increasing the chances of skaters and skate skiers taking serious falls. Use of motorized land vehicles should be confined to existing roads, and motorized watercraft should be prohibited in the recreation area.

2. Firearm Use. Given the City and Borough of Juneau's restriction on the discharge of firearms within a half mile of a road and the state's restriction on hunting within 1/4-mile of a road, there doesn't seem to be much of the recreation area that can be hunted legally regardless of what management action the Forest Service adopts. What appears needed is better interagency cooperation in enforcing existing firearm restrictions. This observation is based on an experience last winter when two of us were photographing an ice cave at the glacial terminus. I heard shots ricochet, and noticed two ptarmigan hunters shooting on the large rock outcrop that has become exposed on the west side. I had to holler to them so they'd know not to fire in our direction.

3. Commercial Use. The hundreds of visitors pouring out of tour buses, the incessant noise of helicopters overhead, and the droves of commercial rafts launched on Mendenhall Lake on a summer day detract from the quality of experience that is sought by those who recreate unobtrusively as individuals or in small groups of two, three, or four. Although commercial recreation businesses provide welcome income to Juneau, they can also do so at the expense of individuals' personal outdoor experiences.

Canoeing and kayaking on the west side of Mendenhall Lake can be a quality experience for individual recreationists but only if they don't have to compete with bus loads of commercial rafting clients at the launch point that is referred to in the DEIS as "the ATA gate." With as many as eight private full of commercial clients at the one good landing area at the base of the large rock outcrop, the quality of the experience is degraded.

I recommend that commercial use be reduced or at least held to existing levels, with a possible reallocation of user days among different types of commercial operations. I urge you not to allow an increase in the commercial use of the rock outcrop, but if you do, commercial use needs to be permitted on less than half the days of the week, and the actual days of the week that are permitted need to be designated and made public so that others will know when they can count on using the outcrop without having to compete with commercial groups.

Please refer to response 1.1. Use of snowmobiles and ORVs will be allowed on some portions of Mendenhall Lake in the winter (see Chapter 2, Alternative 6). A discussion of the impacts of this use may be found in Chapter 4, Issue 1, Alternative 6. Other portions of Mendenhall Lake and the rest of the Mendenhall Glacier Recreation Area will be closed to snowmobiles and ORV use and should provide adequate area for non-motorized activities. As described in the Record of Decision, motorized boat use on Mendenhall Lake is also prohibited. The Juneau Ranger District now has two full time law enforcement officers. This is an increase in the law enforcement capability we have had in the past. It is anticipated that with this new closure and the current level of law enforcement resources, it will be possible to adequately enforce these closures.

## 3.4

Please refer to response 2.4. Hunters need to know if there are other people near them. You did the right thing by letting your presence be known. Currently, the rock outcrop on the north side of Mendenhall Lake is closed to hunting by state regulation. More education and enforcement would help this situation. We will also work with the groups that coordinate the local hunting education programs to provide information on the Recreation Area. Please refer to response 2.1., and Chapter 4, Issue 2 - Firearm Use.

## 3.5

Public scoping showed that commercial use in the Recreation Area was a significant issue. To meet the desired future condition for the area and to respond to public concerns (both for and against increased commercial use), we developed a capacity analysis. This analysis looked at recreation experience to be provided and site capacities at the Visitor Center, Mendenhall Lake, Mendenhall River, West Glacier Trail, Moraine Ecology Trail, East Glacier Loop Trail, and Nugget Creek Trail. For many visitors to the Recreation Area, these are the only way that they will be able to visit or experience their National Forest. By concentrating commercial use to certain areas and allowing commercial use up to a designated capacity level, we hope to retain the undeveloped, "wild" character of this recently deglaciated landscape, while still allowing room for growth and new commercial opportunities.

Please also refer to the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision for a description of our preferred alternative and our reasons for selecting that alternative.



#### 4. Access

- 3.7 a. Access to West Shore of Mendenhall Lake. As a courtesy to private individuals who wish to launch personal canoes, kayaks, and rafts on the west side of Mendenhall Lake, the Forest Service needs to ensure that what is referred to in the DEIS as "the ATA gate" is available to private as well as commercially guided recreationists. This site is the most convenient launching point on the entire lake.

I recently attempted to drive to the edge of the lake in order to lift the canoe off the top of the car, set it in the water, and take the car to the parking lot. To my surprise the gate was locked, and I had to park the car on the road. From there I carried the canoe the short distance to the water, planning on moving the car to the parking lot once the canoe was in the water. Before I could get back to the car, a tour bus full of clients was waiting to park where I temporarily left my vehicle. A company representative came down to the water and told me I needed to move my vehicle. After I moved it to the parking lot, I had to thread my way back to the lake through a tightly packed throng of commercial rafting clients who were donning their life jackets. That's the same sort of tour bus congestion that we thought we'd avoid by launching on the west side of the lake rather than at the Visitors' Center. Combine that kind of a canoe launching hassle with an encounter with eight commercial kayaks at the rock outcrop at the north end of the lake, and whatever peace and solitude one might have sought in the day's outing has been shattered. It would be more relaxing to stay home and mow the yard, but that's not what we came to Alaska for!

- 3.7 Alternative 5 needs to be modified so that the so-called "ATA gate" is managed as a public access point, and the rights and quality of experience of private as well as commercially guided recreationists need to be respected and accommodated.

b. Access to Glacier. Page 26 of the DEIS features a proposed management action that reads as follows: "Close the lake in front of the face of the glacier due to hazards from ice calving."

- 3.8 Rather than imposing a blanket closure that is unjustified and for which there isn't likely to be sufficient enforcement funding, the Forest Service should post warning signs or closure signs only where the risk of calving and associated waves is the greatest.

Those who have watched the glacier over the years know that the calving hazard is very much reduced compared to what it was for several decades, and a blanket closure is neither warranted nor likely to be obeyed. People are far more likely to respect judiciously located signs that read something like, "Warning - Highest Risk Area for Calving and Associated Waves." Such wording should reduce any Forest Service liability by referring to highest risk, without unnecessarily prohibiting travel where the risk is significantly lower. If "closed area" signs must be posted, they should be posted only along the section of the terminus where the ice face poses the highest hazard of calving and associated waves.

This approach would be analogous to what the Forest Service does in alpine ski areas that are on National Forest lands. The agency reserves "closed area" signs for only those places where avalanche

#### 3.6

See the Record of Decision and Rationale for the Decision for a description of our preferred alternative and our reasons for selecting that alternative. As mitigation measures, commercial use will not be allowed on the rock outcrop near the face of the glacier by either outfitter/guided hiking or boat tours. Outfitter/guided hiking tours on West Glacier Trail will be allowed only on weekdays (Monday - Friday) during the summer tour season.

#### 3.7

In the Record of Decision, the lake access point located at the West Glacier Trailhead will be available for public use. See The 1996 Mendenhall Glacier Recreation Area Management Plan, Management Actions for the West Lakeshore Unit.

#### 3.8

This change has been made. Please refer to the 1996 Mendenhall Glacier Recreation Area Management Plan, Management Actions for the Visitor Center Unit.

hazard or cliffs are so onerous that a reasonable person can appreciate the need for such closures. Other areas are signed according to their relative difficulty and hazard. Instead of closing all highly difficult and somewhat hazardous runs, most are signed with a black diamond and the warning, "Most Difficult."

3.9

5. Fish & Wildlife I can't imagine the Forest Service selecting anything other than Alternative 5 for the protection of shorebirds and waterfowl - especially Arctic terns and nesting gulls. As much as I like to canoe and kayak the west side of the lake, I'd gladly honor a closure during periods critical to the success of these populations. To not protect these species would be irresponsible on the part of both the Forest Service and those of us who use the area.

I appreciate the opportunity to comment on the recreation area plan and would appreciate being kept apprised of your deliberations and decision.

Sincerely,



3.9

Please refer to the Record of Decision and Rationale for the Decision for the Forest Service preferred alternative concerning protection of shorebird habitat. Also see Chapter 4, Issue 5 - Fish and Wildlife, Alternative 6 for analysis of impacts to fish and wildlife.

OCT 20 '95

Karla Hart

DISTRICT RANGER \_\_\_\_\_  
DEPUTY RANGER \_\_\_\_\_ 369 S. Franklin, Suite 200, Juneau, AK 99801  
T/M \_\_\_\_\_ fax 907-463-4453, phone 907-463-3466  
REC/LANDS \_\_\_\_\_  
F&W \_\_\_\_\_  
B.M. \_\_\_\_\_  
AGVE PLANNER \_\_\_\_\_  
VIS \_\_\_\_\_  
ENGINEER \_\_\_\_\_  
COLD WATER \_\_\_\_\_

October 15, 1995

Karen Mollander  
District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, AK 99801

RE: 1900/2300 DEIS, Mendenhall Glacier Recreation Management Plan Revision

Greetings:

4.1 I do not have time to review the entire DEIS document as closely as I might wish before the comment deadline. I am a little confused between the Forest Service proposed alternative and the preferred alternative. Consequently, I will comment on specific issues rather than on alternatives.

4.2 Motorized Recreational Vehicle Use. I support honoring the requests of the immediate neighbors to have use restricted.

4.3 Commercial Use of Trails. I object to any commercial use of any trails within the Mendenhall Recreation Area. I have been guiding very small numbers of guests on the trails under permit to Alaska Rainforest Treks since 1988. I have intentionally limited use of the trails due to the importance of these trails to local residents and unguided visitors. At the end of the summer of 1994 I decided to relinquish rights to use those trails, deciding commercial use was not appropriate. I oppose any commercial trail use in the Mendenhall Glacier Area.

4.4 Commercial guiding on other Juneau trails is available to cruise ship passengers at this time. Anyone on a cruise ship wanting a natural history interpretative experience on the Juneau trail system has access to those hikes. The impacts from that use has already created quite a furor in the community. Commercial guiding would bring an additional volume of people to already heavily used trails, which despite the use maintain a friendly sense, in large part because of small groups.

Commercial use of local and visitor noncommercial recreation sites in the Juneau area has been an area of great discussion over the past couple of years as cruise ship shore excursions seek to meet the needs for more active adventures for their ever-increasing number of guests. Juneau is presently studying impacts of tourism on Juneau. For the Forest Service to commit to some long-

4.1

Please refer to response 3.2

4.2

Please refer to response 1.1 and 3.3. ORV use will be prohibited in all portions of the Mendenhall Recreation Area, except on the west side of Mendenhall Lake when it is frozen.

4.3

Please refer to response 3.5, Chapter 4: B - Issue 3 - Commercial Use, the Record of Decision, and Rationale for the Decision for a description of our preferred alternative.

4.4

A management allocation for commercial uses in the Mendenhall Glacier Recreation Area are set in the Record of Decision. A discussion of the impacts of these levels of commercial use can be found in Chapter 4, Issue 3, Alternative 6.

4.4 term commercial use of trails at this time is inappropriate and will lead to greater community conflict.

4.5 The East and West Glacier Trails are readily accessible to anyone choosing to hike them. There is easy access through a variety of means. Public transportation via city bus to within a mile of the trailhead is available for \$1.25 each way. If this is not convenient or too far to walk either a taxi may be hired or a rental car for \$35-\$45/day, with a single rental car able to carry a party of four for about \$10/person transportation costs.

There is interpretation information and trail information available through the local Alaska Natural History Association outlets and local bookstores, as well as through Forest Service Naturalists at the Visitor's Center. The Forest Service offers free interpretative walks from the Mendenhall Visitor Center to meet interpretative needs of visitors.

4.6 In my opinion there are no significant safety issues relating to having those people who desire to head out on the East or West Glacier Trails on their own. Traffic is heavy enough that anyone staying on the trail will be able to receive assistance in a timely manner if required.

Environmentally, the trails are able to handle the volume and type of traffic presently experienced. Small groups mean that special passing areas are not required, nor are interpretative gathering areas which would ultimately be required if interpretation is to occur. (If there is to be no interpretation then there really is no need for the commercial hiking as well). While volume will grow it will not be by large increments as would happen with permitted commercial hiking.

4.7 On the other hand, allowing groups would create the type of hostility and/or avoidance behavior that has occurred on Outer Point Trail, another previously popular local hike. Passing large groups creates additional off-trail trampling, either as the group or the passers move off to the side. Additional hikers would create additional wear on the trail, necessitating more maintenance. Some areas of difficult foot which presently exist as challenges to the hiker that are a part of the walk would likely be eliminated. Ultimately we could end up with another "street" surface through the woods, be it boardwalk, stairs or the gravel surface the Forest Service landscape architect decided was needed at Pack Creek.

4.8 For many hikers, runners and bikers, the point of going on a trail rather than a bike path or street is to experience the variety of treads, steps and terrain required to travel the trail. An uneven surface is desired.

4.9 Allowing commercial use on any of the Mendenhall Glacier Area trails is again resulting in tourism taking away from the community rather than contributing to the community. If there is serious interest in commercial hiking at the Mendenhall Glacier Area, I suggest that a new trail which would in no way interfere with existing trails or existing travel areas be developed at the expense of the permit holders to be used as a commercial guided hike trail. This trail could then be used by locals who chose to travel a commercial hiking trail, knowing that trail came to be as a direct result of the commercial hiking. This would offset impacts of the commercial hiking. Perhaps the Tolch Rock trail would be appropriate to construct for commercial hiking, I do not

4.5

For many visitors to the Recreation Area, tours are the only way that they be able to visit or experience their National Forest. By concentrating commercial use to the East Glacier Trail, Nugget Creek Trail and West Glacier Trail, we hope to provide additional access for those visitors who are unable of the recreation opportunities in the Recreation Area, yet still maintain desired future condition for the area.

Thank you for your comment concerning the Alaska Natural History Association outlets.

4.6

Please refer to response 4.5.

4.7

Please refer to response 4.4. The capacity identified for West Glacier Trail is a level which the trail can withstand and for which this trail is maintained. Should resource damage begin to occur as a result of commercial use, the authorized use level will be re-evaluated. East Glacier Trail is currently scheduled for reconstruction. A design is completed and the project is a high priority one for trail construction funding. The trail tread, bridges and drainage structures will be constructed to adequately handle the level of use while still maintaining the natural visual setting of the area.

4.8

Thank you for your comment, we will consider this as we develop future trail maintenance plans. Please see the response to 4.7.

4.9

Allowing commercial use in the Recreation Area provides economic benefits many local and out-of-area businesses. The community benefits through additional jobs, increased tax revenues, and a more diversified economy. Special use permit fees generated also go to the United States Treasury, a portion of these fees collected being returned to local governments for schools and roads. We also understand the public concern that commercial use can interfere with other users' recreation experience, and have attempted to respond to this concern (please refer to response 3.5).

As mitigation measures, commercial use will not be allowed on the rock out near the face of the glacier by outfitter/guided hiking or boat tours, and tours on West Glacier Trail will be allowed only on weekdays (Monday - Friday) during the summer tour season.

4.9 have personal knowledge of that proposed route. If not, and the decision is made that commercial hiking must be allowed somewhere in the Recreation Area I would support the Moraine Trail over any other. It could easily be improved to a high volume tread and is least likely to have the overall character changed by tread "upgrading" and high volumes of traffic. The length and difficulty of the trail will be better suited to a wider range of people and the East Glacier Trail will remain intact and available for hikers wanting a more challenging hike to do on their own.

4.10 Closures Re Nesting Terns/Gulls and other ground nesting. I support these closures. They should be accompanied by a solid educational and signage program to elicit community support rather than resistance to another rule. Enforcement of dogs on leash regulations should be an important component of protecting the nesting birds.

4.11 A bench on West Glacier Trail. Please don't. They are intrusive and seem to attract litter and vandalism. There are plenty of rock outcroppings on which hikers can sit just fine.

4.12 Mt. McGinnis. I support leaving it as the cross county route that it is. My one suggestion re overnight camping would be to allow some flexibility to allow for a bit of camping of the Bivouac one night sort on Mt. McGinnis.

4.13 Shooting. I support closures. I was once in a situation of ducking from tree to tree at the back of East Glacier trail, unable to tell which direction shooting was aimed. I prefer no shooting on the Mt. McGinnis Unit within whatever distance the allowable shot can travel and a bit of error for safety (e.g. no shooting with ??hundred yards of any established trail or route) and then shooting being allowed only during hunting seasons. "Recreational" shooting is the most frightening to me as a hiker.

4.14 Alaska Natural History Association Outlet. I find no mention specifically authorizing or mentioning the continued partnership of ANHA with the Forest Service at the Mendenhall Visitors Center. Is this required. I support ANHA's presence and sales of interpretative materials.

4.15 Beverage Concession. Strangely enough, I think that a small beverage cart (no food service) located in the back of the new East Glacier Shelter would be an asset. I still miss the old restaurant that existed in the Mendenhall Visitor Center originally. However, I think that any beverage concession like this should be operated by a nonprofit that would return the profits to environmental education and interpretative programs for local schools. Perhaps proposals could be solicited from the Discovery Foundation, SeaWeek Sponsors or others. Maybe something could be done in conjunction with a jobs training program with the highschool or UAS.

I look forward to continued involvement as you develop the final Environmental Impact Statement.

Regards,

Karla Hart

Please refer to response 3.9.

4.11

Please refer to response 2.10.

4.12

The route to Mt. McGinnis will remain a cross country route. Overnight camping in this unit is allowed. Please refer to the Record of Decision, description of the preferred alternative, and the 1996 Mendenhall Glacier Recreation Area management plan, Management Actions for the Mt. McGinnis unit.

4.13

Please see the Record of Decision for the Forest Service decision and rationale concerning hunting in the Recreation Area. Alternative Six was developed in response to public comments on the Draft EIS. In this alternative Mt. McGinnis Unit will be open to hunting with shotguns and .22 caliber rifles. The Dredge Lakes unit will be open to hunting with shotguns during waterfowl season. The situation you described is likely not related to hunting. Illegal use of rifles and small arms within the Recreation Area for non-hunting purposes is the most serious safety concern related to firearm use. Enforcement and education are our best tools to prevent similar situations from happening in the future. Whether a person with a firearm is hunting or not, they need to know if other people are in the area. Please also see Chapter 4, Issue 2 for analysis of effects.

4.14

The Alaska Natural History Association (ANHA) partnership with the Forest Service at the Visitor Center is currently approved by various authorities. Since this partnership was not an issue raised by scoping, it was not specifically addressed in any of the alternatives. Thank you for your comment.

4.15

Thank you for your support of the non-profit organizations that support our operations at the visitor center. In the Record of Decision, it was decided to not allow food or beverage types of concessions.

OCT 25 '95

DISTRICT RANGER *JK* October 21, 1995  
DEPUTY RANGER *JB* 8302 Gladstone St.  
Juneau, Ak 99801

Ms. Karen Mollander  
District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, Alaska 99801

T/M  
REC/LANDS  
F&W  
BM  
MGV PLANNER  
VIS  
ENGINEER  
SOIL & WATER

Dear Ms. Mollander:

We have read the 1995 draft Mendenhall Glacier Recreation Area Management Plan Revision and have some comments on it.

We have lived on Gladstone Street west for several years and have on occasion been annoyed by noise from motorized vehicles, probably motorcycles, operating in the Dredge Lake area. So, we would like to suggest that the management plan include the following:

- 5.1 (1) A detailed description of the types of off-road vehicles that will be permitted in the ORV areas. Perhaps there should be maximum size/weight limitations to preclude the use of monster trucks, humvees, jeeps, etc.
- 5.2 (2) A requirement that any ORV operating in the Recreation Area must have an adequate muffler system. Noise level is somewhat subjective, of course, but it does seem that some sort of standard that reasonable people can understand could be set and that the proposed permit could include agreeing to abide by the standard.
- 5.3 As you may assume from our interest in limiting the noise level, we are not opposed to ORV use in the recreation area. In principle, we feel that public land should be available for a variety of uses. Alternatives 3 and 4 both seem to offer that, although No. 4 better separates motorized and non-motorized users.
- 5.4 Regarding parking areas to allow access to ORV areas, would it be possible to enlarge the proposed Glacier Spur Road parking area and eliminate the Back Loop one if, as it appears to us, it is to be located near residences. Also, some of our concern with this second parking area is that it is located across from a well-used bike path that ORVs might be tempted to use as a means of getting to the access area.
- 5.5 Our final concern is with the proposed vehicle turn-arounds for borough use. We hope they (particularly the one on Gladstone Street west, naturally) would be of minimum size so as not to become additional parking areas for recreation area users.

Sincerely,

*Ted and Sally McIntire*  
Ted and Sally McIntire

5.1

Please see the Record of Decision and description of the Forest Service preferred alternative. ORV use is prohibited in the Mendenhall Glacier Recreation Area, except for the west side of Mendenhall Lake when it is frozen. Since the use of motorized vehicles is being prohibited, we will be developing a list of approved vehicle types or their characteristics. See Chapter 4, Issue 1, Alternative 6 for a discussion of impacts.

5.2

Please refer to response 1.1. Noise levels will be minimal because the majority of the Mendenhall Glacier Recreation Area will be closed to ORV travel.

5.3

Please refer to response 1.1 and 3.3. The Record of Decision will close the majority of the Mendenhall Recreation Area to ORV use, however, winter ORV snowmobile use will be authorized on the west side of Mendenhall Lake. This will allow some ORV use while leaving a major portion of this area available for use without the presence of ORVs.

5.4

The Back Loop parking area is the existing parking area next to Mendenhall River Bridge across from Mendenhall River Community School entrance, see Map 4 (Alternative 2 - Proposed Action) in chapter 2. This parking area has been in place for several years and is separate from residential areas. Our plan includes a proposal to upgrade this parking area, dependent on future funding. The preferred alternative also recommends building a parking area the Glacier Loop administrative site off of the Back Loop Road. Please refer to the Record of Decision, Description of the preferred alternative, and to Chapter 4, Issue 4 - Access, for analysis of effects.

5.5

Chapter 4, E. Issue 4 - Access, has been rewritten to state that these cul-de-sacs would be for emergency vehicle turnarounds only and parking would be restricted at each. Please refer also to comment letter 37 from the City and Borough of Juneau.



United States Department of the Interior

BUREAU OF MINES  
ALASKA FIELD OPERATIONS CENTER  
P.O. Box 20550  
Juneau, Alaska 99802-0550  
(907) 384-2111

October 24, 1995

Mr. Karen Mollander  
District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, AK 99801

Re: Mendenhall Glacier Recreation Area Management Plan Revision Draft Environmental Impact Statement

Dear Mr. Mollander:

The U.S. Bureau of Mines (USBM) has completed its review of the above DEIS, and has no substantial comment regarding the proposed management plan. At the present time, the available information indicates the plan will not have any significant impact on mineral development.

6.1

Thank you for your comment.

The Bureau of Mines has no special environmental concerns or interests regarding the proposed project. Please contact me if you should have any questions or require any further information. Thank you for this opportunity to comment.

JUNEAU  
RANGER DISTRICT

OCT 26 '95

James R. Coldwell  
Mining Engineer

DISTRICT RANGER \_\_\_\_\_  
DEPUTY RANGER \_\_\_\_\_  
T/M \_\_\_\_\_  
REC/INSP \_\_\_\_\_  
F&W \_\_\_\_\_  
B.M. \_\_\_\_\_  
MGT PLANNER \_\_\_\_\_  
VIS \_\_\_\_\_  
ELECT \_\_\_\_\_  
COMM \_\_\_\_\_

OCT 27 '95

Ms Karen Mallander,  
District Ranger  
Juneau Ranger District  
8465 Old Dairy Rd  
Juneau, AK, 99801

DISTRICT RANGER Wm Oct 25, 1995  
DEPUTY RANGER 62  
T/M \_\_\_\_\_  
REC / LANDS \_\_\_\_\_  
F & W \_\_\_\_\_  
B M \_\_\_\_\_  
M/C PLANNER \_\_\_\_\_  
VIS \_\_\_\_\_  
ENGINEER \_\_\_\_\_  
SCHOOL \_\_\_\_\_

Dear Ms Mallander,


The planning team has done an excellent job developing the draft EIS for the MGRA. As noted in an earlier letter, my thoughts on the MGRA are still the same: the users should leave only foot prints and bike tracks, don't allow anything in the area that could hurt, kill, bother the other users with their noise, or disturb the terrain with their tracks. Under this scenario, I would select the following alternatives:

Issue	Alternate chosen
Motorized RV use	2
Firearm use	4
Commercial use	3
Access	2
Fish and Wildlife	2

Think of the MGRA as a mini park. People chose the area because it offers great beauty, solitude, and peacefulness. Allow even an inch to the noise makers, and you have opened a Pandora's Box of continuing conflicts, damage, and potential injuries. I'm tired of confronting ORV types that parrot the same reasoning for being in the out of bound areas: No signs, I'm new to the area and didn't know any better, or its my God given right to be here because every place else is closed to me.

Increased usage of the MGRA calls for new policies involving the greatest good for most of the citizens using the area. Don't allow the small minority of ORV types sway the policy making. The clothed primates on motorized wheels are not needed in the MGRA.

Sincerely,

  
Herbert W Jaenicke  
Board Member, Trail Mix Inc.  
CBJ Park and Rec Trail Leader

7.1

Please refer to the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision for a description of preferred alternative and our reasons for selecting that alternative.

7.2

Thank you for your comment.



**Mendenhall Glacier Recreation Area Management Plan Revision DEIS**  
**October 1995****Comments:**

8.1 Gastineau Guiding Company fully supports management and regulation of the Mendenhall Glacier Recreation Area. We stress, however, that all of the public, whether choosing an independent or guided experience, should be provided a means of access to all of the recreation area.

8.2 Capacity limits should be imposed when and where necessary in order to control environmental impacts and to provide for a quality experience for everyone. Ideal regulation would control both guided and independent public use.

8.3 Regulation directed only to outfitter/guide organizations unfairly imposes itself on the segment of the public that would rather participate in a safe, environmentally sensitive, guided experience. These people will pay a price by not having equal access to their resource. We should direct ourselves to provide for their continued and equal opportunity to enjoy and appreciate their National Forests.

Specifically, all units of the Mendenhall Recreation Area open for independent public use should also be open for guided public use. The West Glacier Trail, for example, which provides a beautiful and unique experience, may become "out of bounds" for some users. The Moraine Ecology Trail is ideal for guided interpretive uses, and yet it may be designated "non-commercial".

8.4 In a time of budget restrictions, the Forest Service should encourage private sector involvement to help supplement interpretive and maintenance efforts. To avoid complete use restriction in certain sensitive areas, it may be necessary to assign guided use to specific times and/or days. As an example, Gastineau Guiding Company could realistically limit use of an area such as the West Glacier Trail to weekdays only.

We appreciate the opportunity to comment on the Mendenhall Glacier Recreation Area Management Plan Revision, October 1995. Please contact me with any questions.

Bob Janes  
Gastineau Guiding Company

**8.1**

The Recreation Area is open to the public. Visitors can use a number of means to get there, including public transportation, private tour coach, tour mini-van, or taxi, personal vehicles, rental cars, hotel/motel courtesy vehicles, bicycle, horseback, jogging, and walking.

**8.2**

Please refer to response 3.5 and the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision for a description of our preferred alternative and our reasons for selecting that alternative.

**8.3**

The high levels of visitor use in the Recreation Area are primarily a result of increased use by commercial tour operators (please refer to Chapter 3, J. and Chapter 4, Issue 3 - Commercial Use). Visitor industry projections indicate continuing growth in number of cruiseship visitors, yet visitor numbers in the Recreation Area are approaching site design capacities.

Public scoping showed that commercial use in the Recreation Area was a significant issue. To meet the desired future condition for the area and to respond to public concerns (both for and against increased commercial use), a capacity analysis was developed with commercial use concentrated to certain areas and at specific use levels. Because of these allocation levels, some visitors will not be able to visit the Recreation Area by commercial tour. Visitors, however, can still access the Recreation Area and participate in "safe, environmentally sensitive experiences" through other means than a guided commercial tour.

In addition, please refer to response 3.5 and to the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision for a description of our preferred alternative and our reasons for selecting that alternative.

**8.4**

The Forest Service welcomes partnerships to help with interpretive and maintenance efforts. Any organization or individual is encouraged to contact us if they are interested.

OCT 30 '95

October 26, 1995

Ms. Karen Mallander, District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, Alaska 99801

DISTRICT RANGER *KRM*  
DEPUTY RANGER *JRM*  
T/M \_\_\_\_\_  
REC/LANES \_\_\_\_\_  
F&W \_\_\_\_\_  
B/M \_\_\_\_\_  
MOTOR PLANCHER \_\_\_\_\_  
V/S/NEA \_\_\_\_\_  
FISHING \_\_\_\_\_  
SOLAR WATER \_\_\_\_\_

Dear Ms. Mallander:

The MGRA draft EIS is very detailed and to the point. I have strong feelings against motorized vehicular traffic in the area as has already been proven - the fact that they won't stay in their own area. The big rocks set up as a barrier have been moved or other paths have been made around them. I realize it only takes a few rogues to ruin it for the rest of the motorized riders, yet that area for which they were to stay in has not worked!!! Now that we know the motorized riders won't stay in their own area, I suggest they not be allowed in the MGRA AT ALL!! The area is beautiful to be enjoyed by walkers or non-motorized bikes. The motorized riders are often young and very obnoxious -- almost hitting walkers or scaring them or their pets. My feelings on the plan are as follows:

Issue	Alternate Chosen
Motorized R/V Use	5
Firearm Use	4
Commercial Use	4
Access	2
Fish and Wildlife	2

The only other thing that concerns me would be young people having beer busts and making bonfires that could possibly cause a forest fire. So signs might be put up to notify all that this area is not for partying. The area is lush with beautiful plants and animals and should not be disturbed by clothed young dingdongs who think all areas are open to them. Restricted use of firecrackers and other loud noises are necessary to keep this area pristine.

Thank you.

Sincerely,

*Carrita Morris*  
Carrita Morris

9.1

Please refer to response 1.1 and 3.3. The difficulty of keeping ORV use confined to an area without a geographic boundary was one of the reasons for considering eliminating ORV use in the majority of the Mendenhall Glacier Recreation Area. To provide a small area for ORV and snowmobile use in the winter, the west end of Mendenhall Lake was left open for these vehicles.

9.2

Thank you for your comment.

9.3

As described in Chapter 4, E. Issue 4 - Access, partying, firecrackers and vandalism are prohibited at the parking areas accessing the Recreation Area. Two full time law enforcement officers are now located at Juneau Ranger District to help address illegal uses of the area.

Thank you for your comment regarding signs. Future signing was not considered in this decision, however, your suggestion will be considered when planning signing for the Mendenhall Glacier Recreation Area.

**TAKU CONSERVATION SOCIETY**  
1700 Branta Road  
Juneau, AK 99801

October 25, 1995

Karen Mollander, District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, AK 99801

Dear Ms Mollander:

The members of Taku Conservation Society would like to submit the following comments on *Mendenhall Glacier Recreation Area Management Plan Revision, Draft Environmental Impact Statement*:

- 10.1 | 1. We support placing, in this EIS, a hardened trail for multiple non-motorized use from the Back Loop Bridge to the Mendenhall Visitor's Center going through the Dredge Lake Area. This would greatly enhance the enjoyment of those using the new Mendenhall River Trail. We understand that such a trail would be eligible for Highway ISTE A money. We recommend that application for these monies be submitted as soon as possible.
- 10.2 | 2. We also support a trail from the Visitor's Center to the Campground with a bridge across the Mendenhall River.
- 10.3 | 3. We recommend that on Page 21 under #8 in the yellow pages, Jordan Creek to Powerline Trail, be changed to: **Egan Drive to Powerline Trail**. This would help to complete a really outstanding trail/alternative transportation loop route in the valley. ISTE A money might be available for this too in a joint USFS/CBJ proposal.
- 10.4 | 4. We recommend brushing a short section of a cross country skiing route from the Back Loop Bridge to Mendenhall Lake along the East side of the Mendenhall River. People do ski this route now but are forced out on the river for about 100 yards. This is a serious safety problem.
- 10.5 | 5. The old trail to Tolsh Rock, from someplace along the road beyond the Skaters Cabin, has existed since there was a Boy Scout Camp in the area in 1923. Some of the old trail bridges can still be seen along the trail that is now being used. Not only is it feasible, it exists. It does need some improvements.
- 10.6 | 6. We feel that continuing to permit motorized use in the Dredge Lake area is only putting off the decision to close the area for such use for someone else to make in the near future. Reducing the size of the

10.1

The suggestion for a hardened trail from Back Loop Bridge to the Mendenhall Glacier Visitor Center would not meet the desired future condition for this area. We have added a non-paved trail of this kind for consideration as a potential project, to appendix 3 of the Mendenhall Glacier Recreation Area plan.

10.2

Thank you for your comment. Please refer to response 2.7.

10.3

Lands from Egan Drive to the recreation area boundary are outside the Forest Service jurisdiction, and are outside the scope of this analysis. We are willing to work with the City and Borough of Juneau to connect their trail systems to those within the recreation area.

10.4

Trail brushing is within the scope of this plan, and your comments will be considered in future maintenance planning.

10.5

The Tolch Rock Trail is listed in Appendix 3 to the 1996 Mendenhall Glacier Recreation Area management plan. Like other projects listed here, construction of a new trail would require site specific environmental analysis and public involvement in a separate NEPA process.

10.6

Please refer to response 1.1. The Record of Decision does close the Dredge Lakes area to ORV use as you suggested.

Read 10/30/95 *KPM* ✓  
*J.B. J. Burns*  
*J. Packard*

10.6

use area will not make the neighbors happy, nor all of the other users including school children using the area for environmental studies. People who might use this area don't now because of the motorized use. With better trails planned, the motorized use will only be more of a problem.

10.7

7. We support no hunting in the Dredge Lake Area.

Yours truly,

*Mary Lou King*  
Mary Lou King, Co-chair

10.7

Thank you for your comment.

NOV 06 1995

✓ District Ranger *KRM* Stephen H. Lee  
 P. O. Box 240294  
 Douglas, AK 99824  
 ✓ Joni Packard \_\_\_\_\_  
 \_\_\_\_\_ November 6, 1995  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Karen Mollander  
 District Ranger  
 Juneau Ranger District  
 8465 Old Dairy Road  
 Juneau, AK 99801

Dear Karen:

I have reviewed the Draft Environmental Impact Statement for the Mendenhall Glacier Recreation Area Management Plan Revision and have the following comments:

11.1 1) Regarding the Firearms Use issue, I prefer alternative three, which will continue to allow the use of shotguns during waterfowl and snowshoe hare hunting seasons in the Dredge Lakes Unit and the use of shotguns and rim-fire .22 caliber rifles during hunting seasons in the Mt. McGinnis Mountain Unit.

11.2 2) I hunt snowshoe hare with a shotgun in the Mt. McGinnis Mountain and Dredge Lakes Units and waterfowl with a shotgun in the Dredge Lakes Unit.

11.3 3) I believe the carrying range of a shotgun pellet is not sufficient to cause other users concern about shotgun use in the Dredge Lakes unit, anymore than shotgun use on the Mendenhall Wetlands State Game Refuge. The range of hunting size pellets is a couple hundred yards.

Sincerely,

Stephan H. Lee

11.1

Please see the Record of Decision for the Forest Service decision and rationale concerning hunting in the Recreation Area. Alternative Six was developed in response to public comments on the Draft EIS. In this alternative Mt. McGinnis Unit will be open to hunting with shotguns and .22 caliber rifles. The Dredge Lakes unit will be open to hunting with shotguns during waterfowl season. Please also see Chapter 4, Issue 2 for analysis of effects.

11.2

Please refer to response 11.1

11.3

Please refer to response 11.1.

CAPITAL CAB



100 PEOPLES WHARF

586-2772

NOV 06 '95

DISTRICT MANAGER	
DEPUTY MANAGER	
T/M	
REC	
FA	
RI	
IN	
OUT	
FILE	

11-1-95

P O BOX 240854 - Douglas, Alaska 99824

Joni Packard  
Juneau Ranger District

12.1 | Joni - we have already requested an application for permits to the Mendenhall Glacier for the 1996 tour season. Capital Cab has been in operation for 10 years and we did have a permit in the past when it was required & before it was decided it wasn't necessary for Cab to have one. Since the situation seems to be different now, we request reinstatement of our permit.

12.2 | He would also like to be able to take people out to see the glacier at night in the wintertime. With the ferry schedule being the way it is, most Alaska State Ferries arrive at Juneau at night. Many people want to see what they can of Juneau no matter what time it is because it might be their only

*complete ground transportation in the Capital*

#### 12.1

All commercial users must apply for commercial use authorizations and can simply be "reinstated." We will send you a special use permit application will also review our permit files to determine what level of use you may have had in the past. Authorization of any special use permit is a separate process outside the scope of this EIS.

#### 12.2

Closure hours will be in effect at designated recreation area access point. However, commercial users may be authorized to use the Visitor Center parking lot when they are approved this use in a special use permit.

12.2

opportunity to visit our city. At night, there isn't a lot to see except a quick trip down town so the highlight is always a sight of the glacier. As you know, the glacier is beautiful by moonlight as well as daylight and if they are lucky enough to see the northern lights over the glacier they forget the inconvenience of the ferry schedule & leave here with a wonderful memory of the beauty of Alaska.

12.3

We understand you close the glacier at night because of the vandalism but having cabs go out there would cut down on vandalism instead of add to it. Cabs have always been eyes on the road for the police department because we are on the road 24 hours a day.

Thank you for your time and attention.

Deanna Skilton  
Capital Cab, Inc.

12.3

Thank you for your comment. We appreciate hearing about any vandalism or other problems occurring out in the Recreation Area and are grateful for community "eyes" and "ears" that can help us reduce illegal activities in the area.

**Raincountry Flyfishers**  
**Juneau, Alaska**

November 11, 1995

**RECEIVED**

NOV 13 1995

**Juneau Ranger  
District**

Ms. Karen Mollander  
District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, Ak. 99801

Dear Ms. Mollander:

This letter comments on the Draft EIS for the Mendenhall Glacier Recreation Area Management Plan Revision.

I am writing this letter as President of the Raincountry Flyfishers after consultation with the club at meetings held on October 26 and November 9. The comments presented here represent the club's viewpoint without reservation or minority disagreement.

The Dredge Lakes Unit contains several excellent and potentially excellent fishing ponds for both anadromous and land locked species. These ponds are particularly valuable because of their scenic beauty, the relative scarcity of fishing ponds in Juneau and their accessibility. Moreover the kettle ponds could provide unique flyfishing for land locked species that feed largely on insects. Such fly fishing is all but non-existent along the Juneau road system and could lengthen the fishing season in the spring before the arrival of anadromous fish and in late fall after fishing for anadromous fish becomes poor.

13.1

The Raincountry Flyfishers applauds steps taken to improve the angling experience in the Dredge Lakes Unit and would like to offer assistance in future efforts. We feel that firearms should be banned throughout the entire MGRA and most particularly the Dredge Lake Unit because of safety issues. But most of all, we are vehemently opposed to the motorized vehicle alternative listed as preferred by the USFS.

Alternative 4 for motorized recreation vehicle use permits limited motorized vehicle use within the Dredge Lakes Unit. Alternative 5 which allows none anywhere in the area is strongly preferred by our club. To

13.1

Please see the Record of Decision for the Forest Service decision and ration concerning hunting in the Recreation Area. Alternative Six was developed in response to public comments on the Draft EIS. In this alternative Mt. McGirr Unit will be open to hunting with shotguns and .22 caliber rifles. The Dredge Lakes unit will be open to hunting with shotguns during waterfowl season. Please also see Chapter 4, Issue 2 for analysis of effects.



## **Juneau, Alaska**

13.2 permit any motorized vehicles and most particularly ORVs in any part of the Mendenhall Glacier Recreation Area is unconscionable. Here is our reasoning.

13.3 Much of the experience of fishing is aesthetic. Even if ORVs are "only" permitted within limited areas of the Dredge Lake Unit, it is necessary to hike through devastated areas complete with tire tracks to fish most of the ponds. I refer to the area that has been destroyed by ORVs. The USFS is the steward of one of the most accessible recently-deglaciated and recently re-vegetated areas in the world but has allowed it to be destroyed by a relatively small number of vehicle operators. This is truly shameful.

13.4 Noise generated by ORVs ruins the angling experience. The DEIS allows ORVs along the east side of Moose Lake which is probably the most productive pond for anadromous species in the unit. And so even if ORVs could be limited strictly to Alternative 4 areas, they would be offensive to anglers. But in reality, ORVs are frequently found in areas that are presently illegal. In fact there are tire prints right into Glacier Lake and "ORV-trails" practically everywhere. If ORVs are permitted anywhere, I believe they will continue to go everywhere-human nature being what it is.

13.5 ORVs pose an obvious safety threat to anglers and other hikers in the Dredge Lakes Unit. Paths are narrow and winding and some ORV drivers take a cavalier attitude towards hikers. The fear of accident and attendant anxiety lessens the recreation value to users on foot and in fact has kept me, my family, and many others from using the area at times. Should ORVs be allowed in the area if an Area Management Objective is "to manage for public Safety"?

13.6 Some ORV drivers enjoy driving through water. This destroys fish spawning habitat. Even if alternate routes are provided, I believe that some ORV drivers will still drive through spawning areas which are quite limited and key to continuous natural reproduction of sport fish. I believe there is less than two hundred feet of spawning habitat in the Dredge Lakes Unit and it should be totally protected from motorized vehicle destruction.

13.7 The various enforcement schemes for ORV limited area use are flawed. Enforcement would be exponentially more difficult if ORVs are allowed anywhere within the MGRA. Violations could not be readily detected by observing access points. Instead it would be necessary to take the time and effort to travel deep into the MGRA to see if ORVs are out of bounds. ORVs violate area restrictions now: often and frequently.

Mendenhall Glacier Recreation Area to ORV use. The exception to this closure is that ORV and snowmobile use will be allowed on the west end of Mendenhall Lake during the winter. However, you will be able to hike and fish most of the Mendenhall Glacier Recreation Area without encountering ORV users. See the Record of Decision, Description of the Forest Service selected alternative and Rationale for the Decision, Chapter 2, Alternative 6; Chapter 4, Issue 1, Alternative 6, and the Recreation Area Plan.

13.3

Please refer to response above. The Record of Decision will close the Dredge Lakes Unit to ORV use. This closure will allow you to hike and fish in this unit without encountering ORV users.

13.4

Please refer to responses 13.2.

13.5

Please refer to responses 13.2. Elimination of ORV use from the recreation area (except on the west side of the lake when frozen) should satisfy your concern for safe use of trails for hiking and fishing.

13.6

Please refer to Chapter 4, Issue 5 - Fish and Wildlife, for analysis of effects on fish spawning areas. Please also see response 13.2.

13.7

Please refer to response 13.2 and the Record of Decision concerning enforcement of ORV use areas.

**Raincountry Flyfishers  
Juneau, Alaska**

13.7

Effective professional enforcement of limited use areas would be costly because of the need to take the time and effort to travel off-road into the MGRA. I believe that the enforcement of ORV area limitations would be given a low priority because there are more pressing concerns for the enforcement agencies. Volunteer enforcement is inherently unreliable. Instead of using funds to enforce complicated ORV area use regulations and placing signs (that probably won't last long) to designate limits, wouldn't it be better to spend available funds on restoration of ORV devastated areas or fisheries habitat improvement or better interpretation of this unique area.


13.8

Shouldn't there be concern regarding USFS legal liability if an ORV injures a hiker? Or if an ORV driver injures himself driving into trees, rocks, water, etc.?

13.9

In summary, the Raincountry Flyfishers of Juneau feel the overall MGRA Management Goals are sound, but allowing even limited motorized vehicles use will destroy the natural values of the area and its present and future value for quality angling. I don't believe there is a mandate for a place to be provided given the negative environmental and safety impacts ORVs impose on fragile soils, vegetation, and other inhabitants (human and otherwise) of the area. Given the past history of large scale destruction caused by ORVs, present disregard of area use boundaries and the impracticability of enforcing a limited ORV use area within the MGRA we feel a total ban on ORV use is mandatory to protect both the areas natural values including sport fishing and the use preferences of the vast majority of users and potential users.

Sincerely,



A.J. Soltys

President  
Raincountry Flyfishers  
8305 Counterpane Lane  
Juneau, Alaska 99801

13.8

Please refer to response 13.2 and 13.3, and the Record of Decision. ORV use will be extremely limited in the Mendenhall Recreation Area. Liability is always a concern for all types of activity on National Forest System Lands.

13.9

Please refer to response 13.2 and 13.3, and the Record of Decision. The Record of Decision does close most of the Mendenhall Glacier Recreation Area to ORV use. The exception to this closure is that ORV and snowmobile use will be allowed on the west end of Mendenhall Lake during the winter, however, you will be able to hike and fish most of this area without encountering ORV users. This type of winter use is consistent with the overall management direction for the recreation area stated in revised Mendenhall Glacier Recreation Area plan.



NOV 14 '95

DISTRICT RANGER *ARM*  
DEPUTY RANGER *122*  
T/M  
REC/LAW  
F&W  
BM  
M3/C PLANNER  
VIS. Jodi Packard  
ENCL. LEN  
SOIL & WATER

November 9, 1995

Karen Mollander, District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, Alaska 99801

Re: Mendenhall Glacier Recreation Area Management Plan Revision  
Draft Environmental Impact Statement

Dear Ms. Mollander,

14.1 I have reviewed the draft EIS and agree with the proposed alternative. However, I wish to offer some comments on Item #14 of the West Lakeshore Unit (pg 18). The capacity limits for commercial use of the Mendenhall Lake are stated at 2,930 visitors per summer (May 15-September 15; six people per group, four groups per day. This appears to be a good starting point to protect resources values and visitor experience.

14.2 It is primarily the Implementation portion that interests me. It is not clear how commercial use levels will be allocated. Will permits be issued on a first come, first served basis until the capacity figures are reached? I hope that more than one permit will be allowed. I had inquired last spring about obtaining a permit for Adventure Sports to have guided kayak day trips in Mendenhall Lake and was told that the area was closed - no applications were being accepted. It is distressing to read that Alaska Discovery had a permit for the last two seasons. How did this occur when we could not even apply? Although we had many requests by visitors for trips in the Lake, we did not conduct any trips and honored the indicated closure.

14.3 I am interested in obtaining a permit for guided kayak day trips in Mendenhall Lake for the 1996 season. The groups would be small - no more than six at a time. Please let us know how to proceed. Thank you.

Sincerely

Bill Gissel

14.1

Please refer to the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision for a description of our preferred alternative and our reasons for selecting that alternative. Please also refer to Record of Decision, Description of Monitoring Measures.

14.2

How commercial users special use permit authorizations will be allocated is not a part of this decision. These authorizations are done administratively. Because there are indications of competitive interest in providing tours to the Recreation Area, we will likely do a prospectus and bid process to allocate commercial use. We will also be reviewing priority use records, and determining what levels of priority use, if any, there are for long term permit holders. If priority use is a factor, the prospectus and bid process would offer the "balance" of use that is not allocated to priority users.

Special use permit applications for new use on Mendenhall Lake and River have always been accepted, however because commercial use was determined to be a significant issue, and because new uses require public involvement and environmental analysis, action on new applications have been on "hold" and deferred until the Management Plan is completed and a final decision made.

The new uses and use levels described and analyzed in this management plan revision have addressed the environmental analysis requirement and once the decision is made, we will be able to administratively authorize use as described above, up to the levels in the Record of Decision. If there is competitive interest that exceeds the allocation numbers, then a prospectus and bid administrative process will be used to distribute commercial use among interested bidders.

Alaska Travel Adventures and Alaska Discovery have existing five year permits (which went through separate public involvement/environmental analysis in 1991). These permits expire in 1996. Under Alaska Discovery's permit, they are authorized to bring up to 160 people a year on kayak/canoe tours on Mendenhall Lake.

14.3

We will send you a special use permit application packet for 1996. However, because of uncertainty regarding the federal budget and staffing constraints, and because of the length of time it takes for a prospectus and bid process (which is also subject to appeal), it is unlikely that we would be able to issue permits for new use in the Recreation Area until summer of 1997.

JUNEAU  
RANGER DISTRICT

3345 Tongass, #6  
NOV 14 '95 Juneau, Alaska 99801-9096

November 10, 1995

Very eloquent & complimentary

Karen Mollander  
District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, Alaska 99801

DISTRICT RANGER  
DEPUTY RANGER  
T/M  
REG/LAN  
F&W  
BM  
M.V. PLANNER  
VIS. JONI PALLARD  
ENG. JONI PALLARD  
SCS JONI PALLARD

Dear Ranger Mollander:

The Draft EIS for the revised MGRA management plan has been very helpful to me in reaching my recommendations concerning the decisions you will be making. Its compiler should be commended. It makes much clearer to me both the unique and invaluable qualities of this special area and the greatly increased human pressures it is being subjected to. I am in major agreement with your management direction, strategies, and goals as expressed throughout the EIS, from such statements as that under the heading "Desired future condition" (Preferred Alternative, p.7) to the many specific actions proposed in furtherance of this end. The expanded guidelines as set forth in Appendix 1 (P.A., pp.29+30), are, with a couple exceptions to be noted, also excellent although I would prefer a statement retaining the 1975 emphasis with a secondary emphasis on recreational and educational values. I also agree with the management direction set forth in FSM 2330(C-3) with its stress on

15.1

The 1975 Management Plan's objectives of "managing for a near natural environment with an emphasis on glacial and aesthetic values" and "providing for a balance of experiences to accommodate tourism and local public use" we incorporated into the revisions to the 1996 Management Plan. While not taken word for word, they are woven into the Overall Management Direction, Desired Future Condition, and Area Management Objectives for the 1996 Management Plan.

Existing regulations, agency policies, and other management plans and guidelines were used extensively in the revisions to this plan. They will continue to be a factor in the future management of this area, even though spelled out specifically in this Recreation Area Management Plan. Please refer to Appendix C, Existing Management Direction.

15.1

15.1 maximizing opportunities to know the "pristine nature" and to provide "a maximum contrast with urbanization at National Forest Sites."

15.2 Wherever I differ from your preferred alternative, it is always in the direction of increased restrictions and prohibitions. The primary emphasis should be on protecting, preserving, and, where feasible, restoring the natural habitat. Walking should be the primary means of travel. A cap on visitations is imperative. Money should be spent on supervision, education, and enforcement, not on expanded parking lots and other "improvements" aimed at accommodating more and more people.

15.3 Already, in my view, the MGRA (and, indeed, our entire community)\* has been subjected to excessive pressures from runaway tourism. Too many busses, too many helicopters, too many rafters, too many people, period!

15.4 \*If the draft EIS has a major weakness, it is exactly here. It does not examine the community-wide consequences of MGRA policies and decisions. Such matters as highway and city traffic, air traffic, and down-river effects, for example, all demand close study.

15.2

Please refer to responses 3.5, 4.5, and 4.9.

15.3

Please refer to response 3.5, and the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision.

15.4

A detailed analysis of the community wide effects would be outside the scope of this EIS. The forest Service has no jurisdiction over such things as air traffic, which is under the regulatory authority of the Federal Aviation Administration. Some of the air traffic related concerns were analyzed in the Juneau helicopter glacier landing tours EIS. All commercial bus and van tour operators use standard vehicles or buses. Road traffic is under the jurisdiction of the City and Borough of Juneau. Please refer to Chapter 1, F. Significant Issues for a discussion of issues identified by the public for study in this EIS.

In line with the foregoing, my specific recommendations in the areas of major concern are as follows:

15.5 Motorized recreational vehicle use: Alternative 5 (total prohibition).

15.6 Firearm use: Alternative 5 is my preference but alternative 4 would be acceptable, as far as I can foresee, although without archery.

15.7 Commercial use: Alternative 5 but with a qualification! I found these alternatives confusing. We are told Alternative 5 will provide visitors with "the greatest solitude of the alternative," but we are also told Alternative 2 will offer "More Solitude on Mendenhall River than any other alternative." My view is the more solitude the better, whether on lake, river, or trail. So, whatever combination of management decisions and actions caps or even cuts back on present intensive commercial use throughout the MGRA is what I prefer. Such hard decisions are overdue and imperative, it seems to me, if the over-riding management goals described earlier

15.5

Please refer to responses 1.1 and 3.3, and the Record of Decision.

15.6

Please refer to response 13.2 and 13.3, and the Record of Decision. Archery shooting will be allowed in the Recreation area.

15.7

You are right, it was confusing. Corrections have been made to these numbers. Please refer to Chapter 4, Issue 3 - Commercial Use. Please also see Chapter 6 - Description of alternative 6. Regarding commercial levels in the Recreation Area, please also refer to the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision.

15.8 Access: A combination of alternatives seems best here, excluding Alternative 3. If Alternative 2 is adopted, perhaps the Dredge Lake Road Trailhead could be closed, although I would miss it as it has been my most frequent route into the MGRA for forty years or so.

15.9 Fish and Game: Alternative 4 or if deemed necessary for <sup>further</sup> protection of nesting birds, Alternative 5.

That's how I see it. As indicated, the MGRA has given me great joy for many years, as a birder, hiker, fisherman, berry-picker, cross-gatherer (d other greens), & so on. As Huck said, "It's been grand!" My thanks to all the Forest Service employees and others who have worked so hard over the years to make sure such experiences are still available. Twice in October of this year I spent several happy

15.8

Please refer to Chapter 4, E. Issue 4 - Access, Alternative 6, for a description of the effects of Dredge Lake Road Trailhead. Construction of new access sites would lessen parking problems at other access sites, including Dredge Lakes Trailhead.

15.9

Please refer to the Record of Decision and Rationale for the Decision for the Forest Service preferred alternative concerning protection of shorebird habitat. Also see Chapter 4, Issue 5 - Fish and Wildlife, Alternative 6 for analysis of impacts to fish and wildlife.

NOV 15 '95

**DISTRICT RANGER** *ARM*  
**DEPUTY RANGER** *JS*  
**T/M**  
**REC/LAN**  
**F&W**  
**B.M.**  
**MGRA PLANNER**  
**VIS** *John Parkard*  
**ENG/ACEN**  
**SCH** *1*

November 12, 1995

Tim and Maureen Hall  
 1073 Arctic Circle  
 Juneau, Alaska  
 99801

Karen Mollander  
 District Ranger  
 Juneau Ranger District  
 8465 Old Dairy Road  
 Juneau, Alaska 99801

RE. Comments to Draft EIS, Mendenhall Glacier Recreation Area Management Plan

We have reviewed the draft EIS for the MGRA and favor the preferred alternative, Alternative 4. However, we do not agree with several options within this package and offer the following comments.

- 16.1 • We would prefer not to have any recreational vehicle traffic on the West side of Mendenhall Lake. It has been our experience once the area is accessible during the winter months, ORV traffic has no limits. Most of the traffic is late night and policing is difficult, boundaries are indistinct, the abusers are going to stretch the limits and eventually end up in the Mendenhall Campground. If you are going to restrict ORV do it full scale. I can't speak for the people living in the Dredge Lake area but if I lived in the vicinity I would be very opposed to ORV use.
- 16.2 • We personally feel the plan caters to tourists and is somewhat lacking for the people who live here year round. First of all I would charge a healthy user fee for the guide services in the Mendenhall area. Basically they are profiting from the tax base at no cost. I would use that money to upgrade facilities for the locals, i.e., provide cross country ski tracks and ice skating facilities during the winter months from fees collected from tourists and tour companies. This is in lieu of tax receipts from logging companies since there is very little logging going on.
- 16.3 • The tourist use of the Mendenhall facilities appears to rapidly expand from current use, 5,000 plus per trail and 38,000 for river use. I would suggest that this traffic use these facilities during the week and give the locals an unencumbered access during the weekends. Also, this is going to have a tremendous impact on these areas. We hear the river rafters at all hours and is especially notable during the evening and late night. I suggest no activity past ten p.m., when you have suggested the skaters cabin area be closed anyway.
- 16.4 • I understand that most of the budgeted money goes into the Visitor Center what sort of revenues are generated by the center and what are they used for? Again it appears that there is no benefit to the local populous and upgrade of facilities for locals. The locals need a space for themselves and I would rethink the long range plan to reflect tourist / local conflict.
- 16.5 • The distinction between the Dredge Lake, Moraine Lake and Moraine Ecology areas is confusing. The areas appear to have overlapping boundaries.
- 16.6 • On one hand the USFS appears to try and establish nesting areas for gulls and terns and restrict travel in these areas during the nesting and rearing stage, then on the other hand they want to provide access for thousands of tourists in the same local. This puts more pressure on the limited footprint and does not accomplish either goal. You either, establish the nesting areas or provide access, it is contradictory to do both. Again the local who does not have the terrific impact is getting restrictions due to tourism and no benefits from the restrictions.

16.1

The Record of Decision allows winter ORV use on the west side of Mendenhall Lake but prohibits it all other places, including the campground. Loud noise from these machines would be handled under the City and Borough noise ordinance. Law enforcement will be simpler and more effective in prohibiting ORV and snowmobile use in closed areas. For a discussion of the impacts, see Chapter 4, Issue 1, Alternative 6.

16.2

The 1996 Management Plan attempts to balance both local public needs and non-local public needs. Please refer to responses 3.5 and 4.9.

Commercial operators are assessed special use permit fees for each visitor they bring out on tour to the Recreation Area as per National Forest Service policy. Special use permit fees collected are then sent to the U.S. Treasury with 25% of those fees are returned to the State who makes distribution to local governments for schools and road improvements.

16.3

Travel on the Mendenhall River below the National Forest Boundary is not within the jurisdiction of this decision. This Record of Decision places a limit on the commercial use of Mendenhall River and Mendenhall Lake above the National Forest Boundary. This limit is based on a maximum number of encounters of 20 per day of which only 50% may be commercial. The other 50% is reserved for local and other non-commercial users. Your comments concerning times and days of commercial use will be considered as potential special use permit stipulations. For a discussion of the impacts of this use, see Chapter 4, Issue 3, Alternative 6.

16.4

Out of the budget allocated for recreation programs and facilities on the Juneau Ranger District, Visitor Center operations and maintenance accounts for approximately 35%. Other recreation budget dollars on the Juneau Ranger District go to staffing, operations and maintenance of recreation facilities (cabins) and developed recreation sites (Auke Rec and Mendenhall Lake campgrounds, Skater's Cabin, Auk Rec, Lena Beach, Eagle Beach picnic areas). Budget is also allocated for special use permit administration, trails (maintenance), planning/design for the new Visitor Center expansion project, and overhead costs.

Please refer to response 16.2

Most of the developed recreation facilities, such as our cabins, and our developed recreation sites (listed above) plus approximately 150 miles of hiking trail available from the Juneau road system are big benefits for local



16.7

If the USFS is moving more from timber management and into tourism. The FS is going to have to run it like a business and start generating revenues for its management budget as opposed to cart-blanc using the tax payers money. Projects need to be analyzed on their merits and their ability to generate a profit through cost benefit analysis. Welcome to the real world.

16.8

It has been my observation that a tremendous amount of tourists come to Juneau. They spend the appropriate amount of money in Juneau relative to other tourist communities in Alaska. But it appears that revenue generated through tourism does not stay in Juneau. Where does the money go and do the locals really benefit from having tourists?

Thank you for the opportunity to voice our comments. Please keep us informed on current and future use of the Mendenhall recreation area.

Sincerely;

*Tim Hall, Maureen Hall*

Tim and Maureen Hall

In the 1975 plan, the area between Mendenhall Lake and the Back Loop Road was divided into the Administrative Unit, Dredge-Crystal Lakes Unit, Moraine Lakes Unit, and the Visitor Center Unit. In order to simplify management of the area, and because of the changes in management strategies, all alternatives, except the no action alternative, have this area divided into the Dredge Lakes Unit and the Visitor Center Unit. Map 4 shows the new management units within the Recreation Area. The Moraine Ecology Trail is a loop trail that begins and ends in the Visitor Center Unit and goes into the Dredge Lakes Unit (See Map 6).

16.6

Please refer to response 3.9. We believe we can accommodate the predicted use at the Visitor Center with acceptable levels of impact to nesting shorebirds. We will monitor to see if new management strategies result in reduced impacts to nesting birds. Area closures could be implemented if mitigation measures are not successful in reducing impacts. The nesting terns and shorebirds are being impacted by cruise ship tourists as well as local recreationists. Local recreationist who walk, run their dogs, bike, or drive ORVs along the south and east shores of Mendenhall Lake are having a negative impact on the terns and shorebirds.

16.7

Congress is responsible for determining how special use fees collected will be used and what dollar amounts, if any, would come back to the collecting unit. Please see response 16.2. A greater return to the taxpayer may result from a prospectus and bid process, however, fees collected will still go to the U.S. Treasury, and cannot be used to offset Forest Service budget costs unless decided otherwise by Congress.

16.8

Please refer to response 16.7. From recent studies conducted by the City and Borough of Juneau's tourism working group, revenues generated through tourism both stay in the community, and go outside the community as well. According to the draft "Juneau's Visitor Industry: An economic Impact Study" (McDowell Group, 1996) visitors spent an estimated \$97 million while in Juneau in 1994. Visitor spending generated approximately \$10 million in visitor industry profits in 1994, with locally owned businesses accounting for just over half of those profits. Finally, the visitor industry provides approximately 18% of all basic jobs in Juneau.

NOV 16 '95

November 14, 1995

Ms. Karen Mollander  
District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau AK 99801

DISTRICT RANGER  
DEPUTY RANGER /AA  
T/M  
REC/LANC  
F A W  
B M  
MOVC PLANNER  
VIS  
ENGINEER  
SOIL & WATER

Re: DEIS Mendenhall Glacier Recreation Area  
Management Plan Revision

Dear Ms. Mollander:

17.1 I read with concern the U.S. Forest Service's decision to eliminate duck and rabbit hunting in the Mendenhall Glacier Recreation Area. I suspect that this decision is generated by complainers who are few in number and do not represent the opinion of the majority of Juneau citizens. I have lived in the Dredge Lake area for over thirty years and, for the past sixteen years, my residence has bordered the recreation area at Dredge Lake. I am not in the least bothered by legitimate hunting activities in this area nor is there any danger to the public as long as firearms are restricted to shotguns. The banning of hunting will not stop indiscriminate shooting at other times of the year which, I suspect, is the major concern.

During the thirty years that I have lived in Juneau, the following areas have been lost to duck hunting by regulation:

- Mendenhall Lake, its shoreline and the Mendenhall Campground area;
- Auke Lake;
- Auke Bay;
- The Juneau Airport and its adjacent ponds; and
- The Gastineau Channel south of the Juneau-Douglas Bridge

Areas that have been lost to development include:

- The central Mendenhall Valley including Jordan Creek;
- 75% of the tidal flats west of the Mendenhall River;
- All of the tidal flats associated with the old Glacier Highway and Egan Expressway including all of the Lemon Creek Valley; and
- The tidal flats on Douglas Island from the Juneau-Douglas Bridge west to Fish Creek

17.2 My point is that there are only two areas remaining in our immediate area that are available to duck hunters and one of them, the Mendenhall Wetlands, is under water at least once a day during shooting hours. Juneau is fortunate to enjoy a relatively low crime rate. When drive-by eggings make the local newspaper and not drive-by shootings, which have become the norm in other locals, we don't have it too bad. The reason for this in part is our small size and the diversity of activities available to our youth: hunting and fishing to mention just two.

17.1

Please see the Record of Decision for the Forest Service decision and rationale concerning hunting in the Recreation Area. Alternative Six was developed in response to public comments on the Draft EIS. In this alternative Mt. McGinn Unit will be open to hunting with shotguns and .22 caliber rifles. The Dredge Lakes unit will be open to hunting with shotguns during waterfowl season. Please also see Chapter 4, Issue 2 for analysis of effects.

17.2

Please refer to response 17.1

Ms. Karen Mollander  
District Ranger  
Page 2

By definition, the purpose of the Mendenhall Glacier Recreation Area is to provide recreation opportunities to the public. Additional hunting closures will result in further compression or elimination of duck hunting opportunities for our youth. Most people, and particularly young people, cannot afford the time or money to fly out to remote areas to pursue activities such as duck hunting.

Duck hunting is the intensive use of the Mendenhall Glacier Recreation Area in the fall and has a minimal impact on other uses which are also seasonal in nature. A ban on firearms with the exception of shotguns during hunting season should be a satisfactory compromise for reasonable people who utilize the Mendenhall Glacier Recreation Area.

Additional concerns I have include the lack of a comprehensive noise study on unmuffled off road vehicles which will be allowed and the lack of an air quality study associated with this use.

There is no information on the impact of habitat modification and the introduction of hatchery King Salmon on the wild Chum Salmon stocks which a number of eagles depend on each winter.

There is no information on flood plain impacts or Section 404 and Section 10 permits concerning the proposed bridge over the Mendenhall River.

What about visual impacts? It would seem that additional foot traffic would also have impacts on tern and seagull nesting which a few short years ago triggered restricting human activity around Mendenhall Lake.

Sincerely,



Mike Millar

cc: Juneau Empire

Alternative Six was developed in response to public comments on the Draft EIS. Please also see Chapter 4, Issue 2 - Firearms, for analysis of effects. In alternative Six the Mt. McGinnis Unit will be open to hunting with shotguns and .22 caliber rifles. The Dredge Lakes unit will also be open to hunting with shotguns during waterfowl season. Both of these options will continue to provide the hunting recreation opportunities you desire.

17.4

Please refer to response 17.3 Our analysis in chapter 4 agrees with your statement, that the intensive time of hunting pressure (fall) does not directly coincide with prime visitor use (summer).

17.5

Please see the Record of Decision, ORV use is prohibited, except on the West side of Mendenhall Lake when it is frozen. This should eliminate most ORV noise originating from the Mendenhall Glacier Recreation Area as well as other ORV resource problems. Unmuffled noise would be a problem to be handled through law enforcement, but since ORV use will be largely prohibited, the risk of continued unwanted, unmuffled noise should diminish. Please also see Chapter 2, Alternative 6; Chapter 4, Issue 1, Alternative 6, and the Recreation Area Plan.

17.6

You are correct, this was not discussed in this analysis. Steep Creek generally has a fewer than ten chum salmon return each year. These fish are in the stream with the sockeye salmon in July. The eagles that feed along Steep Creek in the winter are taking advantage of the late coho salmon run. Alaska Department of Fish and Game uses Steep Creek as a local coho salmon escapement index stream, so they have records of the numbers spawning cohos for many years. From these escapement data, this stock appears to be healthy.

17.7

Please see Chapter 4, B. Issue 1 - Motorized Recreational Vehicle Use, Common to all Alternatives: A separate NEPA analysis will be conducted prior to the decision of whether or not to construct a foot bridge across the Mendenhall River. One purpose of the MGRA plan is to identify possible projects to be considered in the future, during the life of this plan. These projects will require additional, site specific NEPA analysis.

# Gray Line of Alaska

NOV 16 '95

GRAYLINE

DISTRICT RANGER  
DEPUTY RANGER JAC  
T/M  
REC/LAND  
F&W  
B.M.  
MOVC PLANNER  
VIS  
ENCLOSURE  
SOL & WAIT

Karen Mollander, District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, AK 99801

November 16, 1995

Dear Ms. Mollander,

I am writing in regards to the draft EIS for the Mendenhall Glacier Recreation Area Management Plan. As a commercial user there are three items that concern us a great deal. One item is the amount of visitors that we are able to bring to the visitors center. A second item is the prohibition of bicycle tours to the area, and a third is the thousands of illegal visitors brought to the area by commercial users who do not have permits.

18.1

Under the preferred alternative 4, the Forest Service would limit the capacity of the visitors center to 50% for commercial users. With the increasing growth in Alaska tourism, Gray Line of Alaska is currently expecting 95,000 visitors to the glacier for the 1996 season. A limit of 50% of visitor center capacity would greatly hinder our expectations and potential revenue for the Forest Service. I propose that the capacity limit be increased to 75% for commercial users as stated in alternative 3.

18.2

With the recognition of our society becoming more active and health conscious, Gray Line of Alaska has involved itself in the Adventure Tour program. Adventure Tours allow our visitors a more active and hands on approach to the beauty of our state. Bicycle tours are an important part of our Adventure Tour program, and over the last year Gray Line has applied for a permit to allow our visitors to experience the National Forest by bicycle. Acquiring this amendment to our existing permit is very important to us and, therefore, Gray Line proposes the adoption of an alternative that allows commercial users to amend their existing permits to include operating bicycle tours to the glacier and using the visitors center.

18.3

Lastly, a great concern to us are the companies that are illegally conducting tours at the glacier. According to the draft EIS the number of illegal visitors is 73,200. These operators who are bringing visitors illegally to the glacier pose a threat to the community in that no one holds them accountable to insurance and safety requirements. It is also unfair to companies such as ours who pay fees to enter the National Forest and who abide by the regulations. I propose that a stronger effort be made to stop the companies who are conducting tours illegally.

Gray Line of Alaska has enjoyed the long relationship that we have had with the Forest Service. We look forward to continually working together to make the Mendenhall Glacier an enjoyable experience for all. Thank you for considering our comments on the draft EIS.

Sincerely,

*Ken Bechtel*

Ken Bechtel, Division Manager

18.1

Please refer to the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision. Please also refer to Chapter 4, Issue 3 - Commercial Use and Chapter 2, Description of Monitoring Measures. The current decision allows for managed growth as we transition to an expanded facility. Depending on the rate of tourism growth, it could take several years to reach the higher commercial capacity allocation.

18.2

This is an allowable use in the preferred alternative. Please refer to response 18.1.

If there is competitive interest, we will need to go through a prospectus and bid process. Please refer to response 14.3. Once that is completed, permits for existing permit holders can be amended, pending the final outcome of the process.

18.3

Controlling illegal use has been limited in the past due to staffing and budget constraints. Efforts and emphasis to address companies conducting tours illegally will be made as funding allows.

November 10, 1995

Karen Mollander  
District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, AK. 99801

Dear Ranger Mollander:

19.1

As a person who calls the Dredge Lake Area home, I would like to ask you to seriously reconsider the endorsement of Alternative 4 for this area. The ORV users would no doubt be delighted to know they have free rein of the area, but where does that leave the greater number of us who try to live here peacefully? We are at their mercy as they race up our street to "access" (read: destroy) what is going to be theirs for the taking. We, as residents, seem to have lost any claim we might have had to peace. Never mind that the racket they create at any hour of the day or night could be considered, at the very least, a disturbance of the peace anywhere else in town.

19.2

Alternative 2 Proposed Action seems to me to be the solution that allows for all other parties besides the ORV people to actually have a chance to use and maintain the area. Alternative 2 would also make it a gunfire free area, which is nice to think one can expect from an area adjacent to one's home. This alternative is the safest and healthiest action for the greater number of people, as well as being infinitely more conducive to habitat preservation for wildlife. Why should the debate continue past this?

Sincerely,

*Linda Koenings*

Linda Koenings  
8298 Gladstone  
Juneau, AK. 99801

JUNEAU  
RANGER DISTRICT

NOV 16 '95

DISTRICT RANGER  
DEPUTY RANGER *JS*  
T/M  
REC/LANDS  
F&W  
B.M.  
MG/C PLANNER  
VIS  
ENGINEER  
SOIL & WATER

19.1

Please refer to response 1.1 and 3.3. The Record of Decision will close most of the Mendenhall Glacier Recreation Area to ORV use, this should eliminate ORV noise generated in this area.

19.2

Thank you for your comments. See the Record of Decision, description of the preferred alternative (Alternative 6). This Alternative addresses most of your concerns. See Chapter 2, Issues 2 and 3, Alternative 6; Chapter 4, Issues 2 and 3 Alternative 6 and the Recreation Plan for more information.

JUNEAU  
RANGER DISTRICT

Christopher & Louise Miller  
8366 River Place  
Juneau, AK 99801

NOV 16 '95

DISTRICT RANGER  
DEPUTY RANGER 100  
T/M  
REC/LANDS  
F&W November 15, 1995  
S M  
MGVC PLANNER  
VIS  
ENGINEER  
SOIL & WATER

Karen Mollander  
District Ranger  
Juneau Ranger District  
8485 Old Dairy Road  
Juneau, AK 99801

Dear Ranger Mollander,

20.1 This letter is in response to the Mendenhall Glacier Recreation Area Management Plan Revision Draft Environmental Impact Statement. We believe that proposed alternative four (preferred alternative) is not appropriate due to the high number of homes which now border that Forest Service land. We understand that ORV users are complaining that they have been shut out of many other places in Juneau but we are not sympathetic to them.

20.2 Our home borders the Mendenhall Recreation Area, and we frequently hike the trails in the area. We can attest to the degradation caused to the land by ORV use. We can also recall times when our walks have been interrupted by rude drivers. Currently most ORV use is on the trails surrounding and between Dredge and Crystal Lakes. This short distance is not enough to reduce the intrusion of ORV engine noise into our home. Often our peace is interrupted late into the evening or early mornings by the roar of accelerating ORV engines.

20.3 We believe that the requirement of having to show proof of attending a safety orientation session is not enforceable. Who will be checking to make sure that the riders do, in fact, have this piece of paper which will insure that they will ride with caution and courtesy at all times? The Dredge Lakes Unit is a big area and there are too few Forest Service personnel to patrol these trails. Unless there is a full-time ranger in the area that rule is useless.

20.4 On page 4-6 the draft EIS states: "Currently, pioneer routes are being made by ORV users traveling off the existing trails. This use is causing resource damage." We believe continuing to allow ORV use will not help the situation. The report continues by saying that between 1990 and 1994, 101 reports of near-misses and impacted experiences by non-ORV users had been reported. We suspect the reported cases are only a very small percentage of the actual occurrences. 25-30 reports per year should give you an accurate picture of the problems which occur with ORV use in that area. We believe the ORV users have historically abused their privilege to use the Mendenhall Recreation area. ORVs are an incompatible use and should be excluded.

We recommend alternative 2. Thank you for your consideration in this matter.

Sincerely,

*Louise S. Miller*

*Christopher L. Miller*

Louise S. Miller  
Christopher L. Miller

20.1

Thank you for your comment. Please see the Record of Decision and response 16.1.

20.2

Please refer to response 1.1, 3.3 and 16.1. ORV noise originating from the Mendenhall Glacier Recreation Area near your residence will likely be eliminated by this decision.

20.3

Please refer to response 1.1 and 3.3. The safety orientation requirement for ORV users has been dropped because most of the Mendenhall Glacier Recreation Area will be closed to ORV use.

20.4

Please refer to response 1.1 and 3.3. ORV resource damage and safety threat caused by ORV/pedestrian conflicts will be reduced to a very low level because ORV use has been eliminated in most of the Mendenhall Glacier Recreation Area.

Nov. 15, 1995

NOV 16 '95

Karen Mollander  
District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, Alaska 99801

DISTRICT RANGER \_\_\_\_\_  
DEPUTY RANGER JBS  
T/M \_\_\_\_\_  
REC/LAND \_\_\_\_\_  
F&W \_\_\_\_\_  
B.M. \_\_\_\_\_  
MOUSE PLANNER \_\_\_\_\_  
VIS \_\_\_\_\_  
ENGINEER \_\_\_\_\_  
SCIL & A.A. \_\_\_\_\_

RE: Mendenhall Glacier Recreation Area Management Plan  
Revision Draft Environmental Impact Statement

Karen,

I have just finished reviewing the Mendenhall Glacier Recreation Area Management Plan Revision DEIS, (the Plan) and would like to share with you the concerns and position of Alaska Travel Adventures.

Alaska Travel Adventures has been operating commercially in the Mendenhall Recreation Area for the past 16 years. Our Mendenhall River Float Trip began in 1980 and has experienced growth every year since. According to the Plan, our 1995 use constitutes over 99% of the commercial use on the Mendenhall River. Although most of our passengers are visitors from cruise ships, we also offer a heavily discounted rate for locals and provide many complimentary trips for school classes and charity groups. The portable toilets located next to our launching site are the Recreation Area's only base level service that is provided by a commercial user. We currently have permit applications on file to operate kayaking on Mendenhall Lake and guided hiking on the West Glacier Trail.

Over the past 16 years we have guided over 200,000 satisfied customers through the Mendenhall Recreation Area. During this time we have not recieved any indication from them that leads us to believe that commercial use of the Recreation Area should be limited or decreased. It is our hope that these people may return someday to again enjoy their National Forest. It is the interests of citizens and "stakeholders" such as these, that Alaska Travel Adventures represents.

Our major concern with the alternatives that were presented is the capacity limits that are placed on commercial operations such as our Mendenhall River Float Trip. There is no evidence at this time that river rafting on the Mendenhall River adversely impacts other users' experiences in the Recreation Area. However, it appears that the Plan looks at



9085 Glacier Highway, Suite 301, Juneau, Alaska 99801 (907) 789-0052 Fax: (907) 789-1749

21.1

Please refer to response 3.5, and Chapter 1 - A, B, and F, plus Chapter 4, Issue 3 - Commercial Use. Additional public concerns regarding commercial use in the Mendenhall Glacier Recreation Area have been voiced through public scoping, and public comments on both the Draft Plan and the DEIS. Please refer to other letters in this section.

21.1

21.1 | the limiting of participation in commercial activities as the sole solution to handling the growing number of visitors to the Recreation Area. We believe that more effort should be placed on how larger numbers of visitors can be accommodated while slowing the impacts, rather than limiting the number of people that can participate in a National Forest experience.

21.2 | The Plan fails to adequately pursue concepts of better management or employ better technologies to increase capacities/participation. Better facility designs (parking lots, buildings, roads) and expanded hours at the Visitors Center are two ways that more people could enjoy the Recreation Area while still maintaining the quality of the experience. An example of this is Portage Glacier in Southcentral Alaska which had a significant overcrowding problem that was addressed with a new visitors center designed to accommodate large numbers of people, improved bus parking, and a boat concession on Portage Lake. It is our position that everyone desiring a National Forest experience should be entitled to do so. Qualified commercial activities, operating under the regulation of the Forest Service enhance the public's recreational opportunities by offering a variety of ways in which to enjoy and experience the Recreation Area.

21.3 | A more specific concern with regards to placing capacity limits for commercial use is how the numbers were decided upon. There does not appear to be a clear or consistent method for deciding which areas to restrict and what the limits should be. The capacities allowed by the various alternatives seem to be arbitrary and lacking vision. If the intent of the Plan is to limit commercial use, it would be more logical to impose greater restrictions on the Visitors Center since it is the most developed and currently the most visited part of the Recreation Area, and less restrictions on the West side which is currently the least impacted area.

21.4 | Looking specifically at commercial use on the West side of the Recreation Area, it is worth noting that the limits set for use on Mendenhall Lake are allowed to increase substantially (1700% to 4400%) in all alternatives (except #5), while the capacities set for the Mendenhall River increase in much smaller proportions (36% to 55%) and actually decrease by 50% in Alternative #2.

21.5 | It seems contradictory that the capacity limits should so greatly favor increased use on Mendenhall Lake when such use is far more impactful (visually, noise, parking, etc.) than the commercial use on Mendenhall River. Commercial users of the lake operate their entire tour within the Recreation Area. Their vehicles stay in the parking lot during the tour, and participants can be seen from other established facilities such as the Visitors Center. River users are only in the Recreation Area for a brief time. The buses and equipment vehicles do not stay in the parking lot, but depart shortly after the clients are outfitted. The users themselves are only in the Recreation Area for about 30 minutes, as the vast majority of the rafting experience is outside its boundaries. Additionally, the rafting operation cannot be

21.6

## 21.2

Expansion of the Mendenhall Glacier Visitor Center to approximately 5,500 fee has been approved, pending design approval and funding. Steep Creek and Phot Point Trails are also approved for upgrading to provide more space for visitors. These projects, when completed, will help alleviate overcrowding the Visitor Center Unit. Commercially guided tours are approved for several areas of the Recreation Area.

## 21.3

Capacities and commercial use allocation levels were determined in a capacity analysis which is available as a resource report at the Juneau Ranger District. Capacities were based on the recreation experience to be managed (through Recreation Opportunity Spectrum (ROS) class designations), overall capacity of the area or site, and limiting factors. Allocation levels were determined by allocating commercial users 50%, 65%, and 75% of the overall capacity at the Visitor Center, and on Mendenhall Lake and river, at 20% on designated trails.

The Forest Service's intent is to manage for the desired future condition, not to "limit commercial use." Site capacity determinations and commercial use allocations are part of managing the area as a whole in order to meet the desired future condition for the area.

While the Visitor Center is the most developed, it is not the only area that receiving or could receive impacts. The capacity analysis looked at the areas/sites that currently receive high levels of use or where additional future use was being requested. In addition to tour use at the Visitor Center a number of commercial tour operators have expressed interest or requested authorization to provide new tours on the west side of the Recreation Area. These include new boat tours (motorized and non-motorized), guided hiking tours, bus tours, bike tours, taxi tours, minivan tours, recreation equipment concessions, and food/beverage concessions. Also please see Chapter 3, J.

## 21.4

A correction was made to these numbers. Please refer to chapter 4, Issue 3 - Commercial Use. Commercial use allocation levels on the lake and river are not based on allocating 50%, 65% and 75% of encounters allowed the Semi-Primitive Non-Motorized ROS class designation. Mendenhall River use receives a greater proportion of uses, as use on the river is one directional and encounters are of a shorter duration, than use on the Lake.





21.6 | seen from the Visitors Center so the visual impact is much less. Given these differing levels of impact, it would seem that if capacities on the lake were allowed to increase so substantially, then certainly allocation should be provided for equal expansion on the river.

21.7 | On the issue of guided hikes, it is our position that guided hiking should be allowed on all trails in the Mendenhall Recreation Area including the West Glacier Trail. We do not endorse any commercial limits on hiking.

21.8 | Commercial use of the Recreation Area is very important. It provides opportunities for local businesses, employment for local residents and enhanced recreational opportunities for the public. It is also a source of revenue to the Forest Service through permit fees. It is the position of Alaska Travel Adventures that future commercial use of the Mendenhall Recreation Area should be allowed to increase and grow so that these benefits can also increase and grow.

21.9 | We believe that everyone is entitled to enjoy their National Forest and do not agree with limiting the number of people allowed to participate on commercial excursions. High quality interpretive experiences can be provided and maintained for increasing numbers of people through the implementation of more intensive management and better technology. This is compatible with the management goals of the Forest Service and can be done while still meeting the needs and expectations of the public.

21.10 | Given this position, we must endorse Alternative #1 since it is the only alternative that allows for unlimited, but controlled growth of commercial use in the Recreation Area. It does not limit participation but it does allow the Forest Service the flexibility to respond to future changes in the Recreation Area, while continuing to explore more acceptable methods of slowing the impacts of the growing number of visitors to the area.

Thank you for the opportunity to comment on the Plan. It is our hope that these concerns are given consideration when you begin the decision making process.

Sincerely,  
ALASKA TRAVEL ADVENTURES

  
Jeff Keys  
Sr. Vice President

cc: Phil Janik  
Kimberly Bown



9085 Glacier Highway, Suite 301, Juneau, Alaska 99801 (907) 789-0052 Fax: (907) 789-1749

21.5

Please refer to response 21.4. Additionally, while there will be some visual impacts from tour use on the lake, visitors observing canoes/kayaks at the levels authorized in this decision will be minimally affected by the low level of use (24 people/day). Regarding impacts to parking, capacity of the parking at the West Glacier Trailhead was considered in the capacity analysis. Please also refer to the Record of Decision, mitigation measures to address impacts of commercial use at the West Glacier Trailhead. Regarding impacts from raft tours to other users, please refer to response 21.1.

21.6

Please refer to response 21.4 and 21.5.

21.7

This Record of Decision places a limit on the commercial hiking. Criteria for when commercial use may be authorized are listed (see Recreation Area Plan). Also, guided hiking may only occur on East Glacier, West Glacier and Nugget Trails with a daily capacity limit. This limit is based on a maximum number of encounters of 20 per day of which only 20% may be commercial, so as to not preclude existing public noncommercial use. This will allow adequate commercial guided hiking opportunities while providing some trails where this activity does not occur. For a discussion of this use and the capacity determination, see Chapter 4, Issue 3, Alternative 6.

21.8

The level of commercial use authorized by the Record of Decision does allow for continued growth, as well as providing new opportunities for different commercial use within the recreation area.

21.9

The Forest Service is managing for the desired future condition and for type of recreation experiences in the Recreation Area. Please refer to response 3.5, and the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision. Please also refer to Record of Decision, Description of Monitoring Measures.

21.10

Thank you for your comment.

JUNEAU  
RANGER DISTRICT

NOV 17 '95

Chris Donek  
P.O.Box 20624  
Juneau, Alaska 99802

November 17, 1995

Karen Molander District Ranger  
Juneau Ranger District  
Tongass National Forest  
8465 Old Dairy Road  
Juneau, Alaska 99801

DISTRICT RANGER \_\_\_\_\_  
DEPUTY RANGER \_\_\_\_\_  
T/M \_\_\_\_\_  
REC/LAN \_\_\_\_\_  
F&W \_\_\_\_\_  
BM \_\_\_\_\_  
MISC PLANNER \_\_\_\_\_  
VIS \_\_\_\_\_  
ENGINEER \_\_\_\_\_  
SOIL & WATER \_\_\_\_\_

Dear Ms. Molander:

I have just reviewed your latest Mendenhall Glacier Recreation Area Management Plan Revision Draft Environmental Impact Statement (DEIS). I agree that some activities need additional restriction, however the preferred plan has a few restrictions too many. First waterfowl hunting in the Dredge Lakes unit is not a problem and should not be closed. This is a great area for young people to learn to hunt in. The waterfowl season is so late in the fall that few other users are impacted by the hunting.

The tern nesting area closure is far to large and I question the necessity of closing the lake shore. Over the years the terns seem to keep moving their nesting areas back with the recession of the face of the glacier. I would prefer the Forest Service (FS) simply mark a trail in the proposed closed area and request hikers to remain on it during the nesting period.

The principle activity that needs to be restricted is the use of Off Road Vehicles (ORV's). Pedestrians can no longer use a large area of the MGRA because of the machines. They are very destructive to the environment, loud, smelly, and foremost, they are normally operated in an unsafe manner. The DEIS preferred alternative for ORV's is to dedicate one area of the Dredge Lake unit to use by these machines. I don't like it, but since they have been allowed to use the area for the last ten year I concede they are now a user group. My concern with the DEIS preferred alternative is the ability of the FS to enforce the regulations that are needed to make the proposal work. Historical a limited area for the ORV's has NOT WORKED.

I am a frequent user of the area and I own property adjacent to the MGRA. Please consider my requests, and address my concerns.

Sincerely,

*Chris Donek*

Chris Donek

22.1

Please see the Record of Decision for the Forest Service decision and rationale concerning hunting in the Recreation Area. Alternative Six was developed in response to public comments on the Draft EIS. In this alternative Mt. McGin Unit will be open to hunting with shotguns and .22 caliber rifles. The Dredge Lakes unit will be open to hunting with shotguns during waterfowl season. Please also see Chapter 4, Issue 2 for analysis of effects.

22.2

Please refer to Chapter 2, Alternative 6; Chapter 4, F. Issue 5 - Fish and Wildlife, Alternative 6; and the Record of Decision preferred alternative, Rationale for the Decision, and monitoring required by the decision. In our decision, our only restriction was to require dogs be on a leash between Apr 15 through July 15, when on the south and east shore of Mendenhall Lake. Commercial guides will be required to stay a predetermined distance from the gull colony.

22.3

Please refer to response 1.1 and 3.3. By severely limiting ORV use in the Mendenhall Glacier Recreation Area, the Record of Decision, preferred alternative, should address your concerns regarding ORV noise, resource damage safety and smell.

November 17, 1995

Karen Mollander, District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, AK 99801

Dear Ms. Mollander,

Thank you for the opportunity to comment on the Mendenhall Glacier Recreation Area Management Plan Draft EIS. Princess Tours is opposed to the placement of limits on commercial use.

We feel that the opportunity we afford visitors and residents alike is one that allows them to visit the Glacier Visitors Center with minimal impact (we transport many school children to the Glacier during the school year for various programs). By using motorcoaches, we are able to transport a greater number of people with fewer vehicles. Additionally, we provide a safe and escorted chance for people to access the area.

The increase in traffic, both commercial and non-commercial has grown such that the numbers far exceed the capacity for which the current Visitors Center was constructed. It would be nice to see the Forest Service expedite plans for increasing the capacity with the planned addition to the center, rather than somewhat arbitrarily, setting limits on one sector of users - commercial. After all, the Mendenhall Glacier Recreation Area was created for public use, and people that choose to visit via a commercial operator are also the public. Thus, we would stress the emphasis should be on accommodating the public with an expanded visitors center instead of limiting the opportunities for the public to visit the most popular destination venue in SE Alaska.

We would recommend the extension of hours of operation, in order to reduce the peak times during the day when traffic is so heavy. Additionally, the Forest Service should look at providing a full time person to conduct traffic control in the loading, unloading, and parking areas. This will expedite the flow through the facility and greatly increase the efficiency level at which the venue operates.

Again, thank you for the chance to comment on your study.

Sincerely,

S. Kirby Day, III  
Princess Tours  
Division Manager

NOV 17 '95  
DISTRICT RANGER  
DEPUTY RANGER  
T/M  
REC/LAR  
F&W  
B.M.  
MOTOR PLANNER  
VIS  
ENG. N. C.  
SCIL & S.

TOTAL P.01

76  
Rgan Drive  
Suite 300  
Juneau  
Alaska  
99801  
Telephone  
907-461-1000  
Telefax  
907-461-5055

23.1

Public transportation and private motor coaches do transport a greater number of visitors with less impacts (i.e., less vehicles), however, the increasing number of visitors brought out to the Recreation Area has generated public concern. Please refer to responses 3.5 and 4.9.

23.2

Designs for the new Visitor Center are nearly complete however funding to begin construction has not been allocated by Congress. Once money has been secured, it will take two years to complete the project. The Forest Service would also prefer to expand the Visitor Center to accommodate increasing use, but, until that time, we are constrained by existing building capacities.

23.3

We have revised our capacity analysis in response to your comment and have determined additional capacity levels based on extending hours of operation and a longer operating season. We have also determined capacity levels if tour length changes once the new Visitor Center expansion project is completed. This capacity analysis is available as a resource report at the Juneau Ranger District.

Please refer to the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision for a description of our preferred alternative and our reasons for selecting that alternative. Also, please refer to Record of Decision, Description of Monitoring Measures.

Additionally, the Forest Service plans to provide a full time person, beginning this season, for traffic control checking special use permits.

JUNEAU  
RANGER DISTRICT

DOUG JONES

NOV 17 '95

P.O. Box 32031  
Juneau, AK 99803

DISTRICT RANGER  
DEPUTY RANGER *[Signature]*  
T/M  
REC/LANDS  
F&W  
B.M.  
MOLLANDER  
VLS  
ENCLOSURE  
SCIENCE

November 14, 1995

Karen Mollander  
District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, AK 99801

Dear Ms. Mollander:

I am responding to your Draft Environmental Impact Statement for the Mendenhall Glacier Recreation Area Management Plan Revision. My copy is dated October 1995. I have a number of concerns with the draft and with your "preferred" alternative. I think off road vehicles (ORV's) should be eliminated in the recreation area and all my comments will address that point.

- 24.1 • Allowing ORV's in this area essentially precludes use by most other recreational users. You are basically setting this area aside for the personal use of a very small percentage of the Juneau population. You only need one encounter with rude and objectionable ORV operators to totally avoid that area in the future. I know because I was almost run down and then was flipped off and laughed at when I objected to the operation of a three wheeler near Norton Lake (an area closed to them).
- 24.2 • I don't think that reducing the area available to them (as per your preferred alternative) will help the problem. It will probably just increase your enforcement problems.
- 24.3 • The off road vehicles destroy wildlife and bird habitat as is clearly seen in your aerial photographs. They also are destroying spawning habitat, in your draft EIS you state that 200 square yards of spawning habitat will be reduced or eliminated by the use of ORV's.
- 24.4 • This is a unique area, near the glacier with nesting birds in the spring, spawning trout and other salmonids in the spring, summer, and fall; and it is a perfect area to view plant succession after recent glaciation.
- 24.5 • You state over and over again in your draft that you want to improve sport fishing opportunities in the area. If you eliminate ORV's, I think you will see dramatic increases in the numbers of sport anglers as well as hikers, joggers, horse riders, picnickers and swimmers. I am an avid sport fisher but actively avoid that area because of the ORV's. Juneau needs additional sport fishing opportunities in fresh water and I agree that this area is perfectly suited for improvement.

I appreciate the opportunity to comment and hope that you will seriously reconsider your stand on allowing ORV use in that area.

Sincerely,

*[Signature]*  
Doug Jones  
Phone 789-0889

24.1

Please refer to response 1.1 and 3.3. This decision will provide for no ORV use in most of the Mendenhall Glacier Recreation Area

24.2

Please refer to response 1.1 and 3.3, and the Record of Decision for a description of the preferred alternative. Enforcement problems should be much less with most of the Mendenhall Glacier Recreation Area closed to ORV use.

24.3

Please refer to the Record of Decision, description of the Forest Service preferred alternative and rationale which prohibits ORV use in the Recreation Area, except on the west side of Mendenhall Lake when it is frozen. Please also refer to Chapter 4, Issue 5 - Fish and Wildlife for analysis of effects.

24.4

Thank you for your comment.

24.5

Please refer to response 24.3.

NOV 17 '95

DISTRICT RANGER  
DEPUTY RANGER JJJ  
T/M  
REC/LANDS  
F&W  
B.M.  
MISC PLANNER  
VIS  
ENGINEER  
SOIL & WATER

November 15, 1995

Karen Mollander  
District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, AK 99801

Re: Dredge Lake Area Management Plan

25.1 We would like to voice our concerns on the changes proposed in the Dredge Lake Area Management Plan. We have lived on Chelsea Court since 1985 and have faced some problems with the area that adjoins our property. On several occasions we have been awoken in the middle of the night to the sounds of off road vehicles. We strongly urge you to force these vehicles away from houses to areas that are not disturbed by the noise. The noise problem has gotten better in the last few years but it still continues to be a problem in the summer months. Your plan to implement a regular patrol of the area is good, but the controlling of off road vehicles needs to be addressed. We also have a concern with improving trail heads and trails that are so close to houses. We experienced many people this summer peering into our back windows because access is getting so much easier and well known. There are no cut trails behind our house but with increased usage of the area we have experience this problem happening. We would like to see more emphasis on access to trails on Glacier Spur Road away from homes then on Backloop Road which is so close to many homes. The other concern we have is with hunting in the area. If a buffer zone could be considered between populated areas and hunting areas with signs posted on trails this would ease our concern. We have encountered hunters 100 yards from houses in our subdivision. We have also encountered many children who use the trails within this area.

25.4 We have enjoyed using the Dredge Lake Area for the last ten years. The beauty of the forest should be shared with everyone. We would like to see the area improved with trails, fishing, wildlife habitat but not at the expense of near by homeowners with increased vehicle, foot traffic and invasions of privacy.

Sincerely,

John and Jennifer Jenks

25.1

Please refer to response 1.1 and 3.3. Your concern about eliminating ORV noise generated from the Mendenhall Glacier Recreation Area (as heard from nearby residences) has been addressed in this Record of Decision.

25.2

As described in the Record of Decision, Alternative 6, the preferred alternative, would include access along Glacier Spur Road. The new access at the FAA site would be away from residences. Please refer to the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision.

25.3

Please refer to Chapter 4, C. Issue 2- Firearm Use, Common to All Alternatives and Alternative 1 - No Action. An existing city ordinance prohibits the discharge of firearms within 1/2 mile of a city street. Education and more enforcement could help this situation.

25.4

In addition to the existing parking areas, the preferred alternative recommends building two new parking areas to allow access into the Recreation Area away from residential neighborhoods. These will be at the old FAA site off Back Loop Road and off Glacier Spur Road. We hope this will reduce conflicts with residents who live adjacent to the Recreation Area boundary.

Please refer to the Record of Decision, Identification of the preferred alternative, for a description of the alternative that was selected for implementation.



JUNEAU  
RANGER DISTRICT

NOV 17 '95

Karen Mollander  
District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau Alaska

DISTRICT RANGER  
DEPUTY RANGER  
T/M  
REC/LAND  
F&W  
B/M  
MISC PLANNER  
VIS  
ENCL  
SC

Dear Ms. Mollander:

November 16, 1995

The Juneau Chapter of Trout Unlimited (which represents 80 members in the Juneau area) would like to comment on your Mendenhall Glacier Recreation Area Management Plan Draft Environmental Impact Statement. Over the past few years, the local chapter of Trout Unlimited (TU) has provided financial and hands-on assistance to the USFS with habitat improvement and restoration in the Mendenhall Glacier Recreation area. As an active participant in improving fisheries habitat in the Mendenhall Glacier Recreation Area, it is hoped that TU can have an active voice in developing a plan to protect the fisheries habitat.

26.1 Trout Unlimited is very concerned with any activity that might negatively impact either the fish or their habitat in the Mendenhall Glacier Recreation and Dredge Lakes areas. According to the Draft EIS (p. S-10), 14% of the available spawning habitat in the Dredge Lakes area has been impacted by off road vehicles (ORV). Cutthroat trout spawn in very small streams, sometimes less than 1 foot wide, and actively spawning cutthroat have been observed in Dredge Lake streams crossed by the ORV trails.

26.2 The USFS preferred alternative (number 4) allows for the use of ORV's in "designated" areas in Dredge Lakes area. While the new ORV designated area is more restrictive, the potential for ORV damage to critical trout spawning and rearing areas is still significant. There is considerable evidence of historic and continued misuse of ORVs in the Dredge Lakes. New trails have been created illegally and ORVs have obviously been operated in spawning streams and along lake shores. The gamble that ORVS will contain themselves in the proposed designated area presents too great a risk to the fisheries resource in the Dredge Lakes area. Trout Unlimited urges the USFS to consider adopting Alternative 5, which would prohibit all motorized recreational vehicles in the Mendenhall Glacier Recreation and Dredge Lakes areas.

Thank you for the opportunity to comment on the draft EIS. Trout Unlimited looks forward to continued cooperative projects with the USFS in the Mendenhall Glacier Recreation and Dredge Lakes areas.

Sincerely, *Fumi Matsumoto*

Fumi Matsumoto, Past President  
Juneau Chapter of Trout Unlimited  
P.O. Box 35113  
Juneau, Alaska 99803

26.1

Please refer to the Record of Decision, description of the Forest Service preferred alternative and rationale which prohibits ORV use in the Recreation Area, except on the west side of Mendenhall Lake when it is frozen. Please also refer to Chapter 4, Issue 5 - Fish and Wildlife, alternative 6 for analysis of effects.

26.2

Please refer to response above.

America's Leading Coldwater Fisheries Conservation Organization

Washington, D.C. Headquarters: 800 Follin Lane, SE, Suite 250, Vienna, VA 22180-4959 703-281-1100 FAX 703-281-1825

NOV 17 '95

November 16, 1995

Karen Mollander  
District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, AK 99801

DISTRICT RANGER  
DEPUTY RANGER *MP*  
T/M  
REC/LANTR  
F&W  
BM  
MISC PLANNER  
VIS  
ENCLOSURE

27.1 This letter is a comment on the Draft EIS for the Mendenhall Glacier Recreation Area Management Plan. In general, I am most supportive of Alternative 5, although the "Preferred Alternative" is reasonable in most respects. However, as I stated in a previous letter during scoping, I do not support ORV use in any part of the MGRA. The "proposed" action of Alternative 2 to limit ORV use to only a frozen Mendenhall Lake seemed reasonable. Now, for some reason, the planning team has deemed it necessary to allow ORV use in the Dredge Lakes Unit. The *Juneau Empire* article on this quoted someone from the Forest Service as saying that there was overwhelming demand for ORV access. It is interesting to note that page 4-1 of the DEIS reports that of the comments received during scoping, twice as many favored elimination of ORVs. This hardly seems overwhelming demand for ORV use. At any rate, I favor complete elimination of ORVs. The reason is related to both noise and safety as well as concern for the damage to the environment that ORVs cause. I have spent a lot of time in the Dredge Lakes area and I truly find ORVs very annoying. It is really not an issue that "the current available ORV use areas . . . do not meet demand" if an area is judged unsuitable for ORV use. Historical precedent is not reason enough.

27.3 If you are intent on allowing ORVs, I would like to see more of a compromise, since the preferred alternative is more like the No Action plan rather than a compromise to the comments you received. The compromise I suggest is that ORVs only be allowed use on certain days; e.g., Tuesday, Thursday, and Saturday. That way, overall use by ORVs will likely decrease (thus diminishing the effect on the vegetation and land), but the ORV users can still use the area, while hikers and nature enthusiasts can use the area on noise-free days if they prefer.

27.4 I also ask that should the Visitor's Center be expanded, that the expansion be done in such a way that it can not be seen from the glacier. When I walk out to Nugget Creek and look around, I feel like I could be out in the middle of a wilderness area in remote Alaska, instead of a mile from suburban Juneau. The only thing that detracts from that feeling is the Visitor's Center, which was actually quite nicely designed. Please so not detract more from the feeling by having the expansion make the Center even more visible from the lake or the glacier.

Sincerely,

*D. J. Blick*  
David James Blick

9567 Eagle Street  
Juneau, AK 99801

27.1

Please see responses 1.1 and 3.3.

27.2

Please refer to responses 1.1 and 3.3. ORV noise, safety and resource damage in Dredge Lakes has been eliminated by the ORV closure of this area.

27.3

Please refer to response 1.1 and 3.3. Please also refer to the Record of Decision, description of the Forest Service preferred alternative and rationale which prohibits ORV use in the Recreation Area, except on the west side of Mendenhall Lake when it is frozen.

27.4

The expansion of the Visitor Center was approved through an environmental assessment and decision notice in 1993. This project involved a public involvement process as required by regulations. The existing visitor center is visible from almost all vantage points in front of the glacier. The visitor center expansion will be similarly visible, though slightly longer. The Forest Service has approved designs which will result in blending the new building changes with the natural landscape, as much as possible.

NOV 17 '95

DISTRICT RANGER  
 DEPUTY RANGER 162  
 T/M  
 REC/LAND  
 F&W  
 BM  
 M/C PLANNER  
 VIS  
 ENCL  
 SCL & WATER

9567 Eagle Street  
 Juneau, AK 99801  
 November 16, 1995

Karen Mollander, District Ranger  
 Juneau Ranger District  
 8465 Old Dairy Road  
 Juneau, AK 99801

Dear Ms. Mollander,

As a Juneau resident, I would like to comment on the Draft EIS for the Mendenhall Glacier Recreation Area Management Plan. I do not support ORV use in any part of the MGRA. ORV's are environmentally destructive: they destroy vegetation, disturb wildlife, and cause soil erosion. ORV's also greatly reduce other recreational uses in the area: they are annoying as well as downright dangerous to people walking or jogging on the trails.

The Dredge Lake area where continued ORV use is recommended is rich in wildlife due to its extensive riparian area. Its proximity to Mendenhall River School makes it an excellent educational resource; classes often walk over and study nature there. Being close to many neighborhoods, it provide an ideal spontaneous destination for a relaxing, peaceful walk or jog for nearby residents. All of these values are being sacrificed for the pleasure of a few ORV drivers. When I have walked there, my enjoyment of the area was greatly diminished by the continual buzz of ORV engines and the need to stay constantly aware lest one roar around the corner and knock me over.

Page 4-1 of the DEIS reports that of the comments received during scoping, elimination of ORVs was favored 2 to 1. Whether or not the current available ORV use areas meet the demand is not an adequate justification to open an area that is judged unsuitable for ORV use. Historical precedent is also not reason enough. I urge you to completely eliminate the use of ORV's in any part of the MGRA.

I am also concerned about over-use of the area by tourists who are brought there by commercial outfits. These companies are making a lot of money at the expense the taxpayers who have paid for the current visitor center and would pay for the expansion you propose. They are also making money at the expense of degradation of the environment and decreased access to the beauty and solitude of this special area by local residents. I went canoeing on the lake and was hardly able to get my boat and gear out of the water and back on the car without being run over by two buses full of tourists (who get special parking and gate-opening privileges). I favor the capacity limitations for commercial use listed in Alternative 5. I also favor much higher fees for Special Use Permits; these fees should be per person rather than a fixed amount.

Sincerely,

*Sharon Blick*  
 Sharon Blick

28.1

Please refer to response 1.1 and 3.3. The ORV closure of most of the Mendenhall Glacier Recreation Area should address your concerns over ORV safety, resource damage, soil erosion and wildlife disturbance.

28.2

In the preferred alternative, ORVs will not be allowed in the Dredge Lake Unit. Please refer to the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision for a description of our preferred alternative and our reasons for selecting that alternative.

28.3.

Please refer to response 1.1 and 3.3 and 28.2

28.4

Please refer to responses 3.5, 4.9, 16.2, and 16.7. Additionally, please refer to the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision for a description of our preferred alternative and our reasons for selecting that alternative.



✓ DISTRICT RANGER  
 ✓ DEPUTY RANGER  
 T/M  
 REC/LANDS  
 F&W  
 B M  
 MGVIC PLANNER  
 ✓ VIS  
 ENGINEER  
 SOIL & WATER

Comments on the MGRA, DEIS  
Dear Karen Mollander,

Here are some of my thoughts:  
Alternative 6

29.1

ORV use: Developing the new access areas as outlined in Alternative 4. Do not allow ORV access at the mendenhall bridge, or Dredge Lake road. Access at old Fitt site would also be a good idea. Now we need to take alternative 4's

29.2

ORV area and expand it a little, see yellow area on map. There needs to be a small buffer between the riding area and the old Dredge lake access and the trail along the river from the mendenhall river access. Basically I would like to see as much ORV area as possible, and keeping winter use.

29.3

Fire arm use:

The Mt. McGinnis Unit should be left open as in Alternative 4. I also don't see any problem with shotgun use in the Meraine lake area in season.

29.4

Commercial use:

Alternative 2 sounds good. I don't like the idea of guided hiking tours. If someone wants to hike the trail they can go by themselves. These trails have plenty of traffic on them already.

Access:

Alternative 2 sounds great.

29.1

Please refer to the Record of Decision, Description of the preferred alternative.

29.2

Please refer to response 1.1 and 3.3 and 16.1. Since ORV use will be prohibited in the Dredge Lakes area, the ORV access points you are concerned with will also be closed.

29.3

Please see the Record of Decision for the Forest Service decision and rationale concerning hunting in the Recreation Area. Alternative Six was developed in response to public comments on the Draft EIS. In this alternative Mt. McGinnis Unit will be open to hunting with shotguns and .22 caliber rifles. The Dredge Lakes unit will be open to hunting with shotguns during waterfowl season. Please also see Chapter 4, Issue 2 for analysis of effects.

29.4

The Record of Decision does allow commercial trail use, however, only on West Glacier, Nugget and East Glacier Trails. Commercial hiking use will be limited to groups of 12 or less and only four groups per day on these trails (with the exception of the Nugget Trail which will be 2 groups). This is based on the premise that 80% of the trail capacity will be left for non-commercial use. See Chapter 4, Issue 3 - Commercial Use, for a discussion of the impacts of the commercial use of trails. Guided trail tours must be consistent with the criteria listed in the Recreation Area Plan which only allows commercial operations that are consistent with viewing and learning of glacier phenomena (see Area Management Direction in the Recreation Plan).

RECEIVED

NOV 16 1995

Juneau Ranger District

Fish and Wildlife:

Alternative 2

29.5

Once again ORV use is a big concern of mine. There are very few areas around Seward that are suitable for ORV use. The Mendenhall Glacier Recreation Area is one of these places and has been for years. I know there is a need for this area, and there are lots of people who use the ORV area - otherwise there would not be a problem.

I am also confident that many of these users more than likely will not write with their opinion. So I hope that the ones that do write will make the needed difference to keep the ORV area open -

It does get used!

Thank you -

Mark Smith

Box 33224

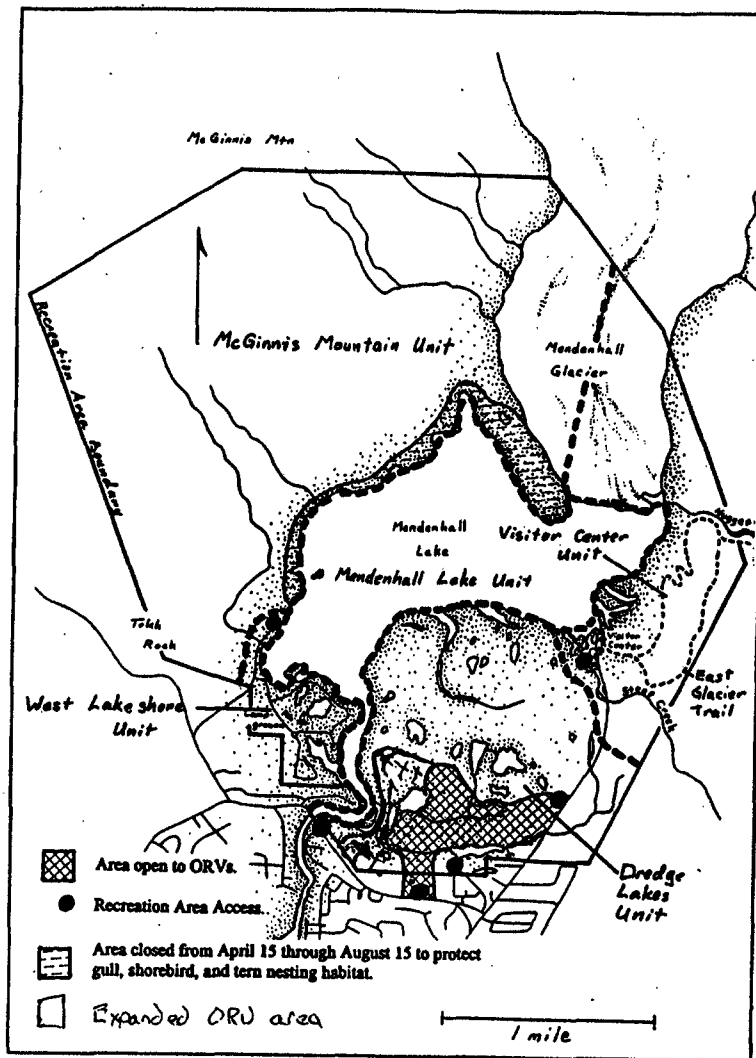
Seward AK

99823

789-1293

29.5

Overall response to scoping and to the Draft Environmental Impact Statement indicates that most of the respondents wish ORV use to be prohibited in the Mendenhall Glacier Recreation. Effects for this are discussed in Chapter 4, Issue 1 - Motorized recreational vehicle use. Some areas have been left open for winter ORV and snowmobile use (see response 3.3). Please also see the Record of Decision and the Rationale for the Decision, which includes a commitment to work with both state, local and private organizations to attempt to find an alternative location.



Map 8. Alternative 4.

NOV 17 '95

November 16, 1995

Karen Mollander  
Juneau District Ranger  
8465 Old Dairy Rd.  
Juneau, Ak. 99801

DISTRICT RANGER  
DEPUTY RANGER 12/3  
T/M  
REC/LANDS  
F&W  
B.M.  
MOUNTAIN PLANNER  
VIS  
ENCL. 1-550  
SOIL & WATER

Re: Comments on Mendenhall Glacier Recreation Area Management Plan  
Revision Draft EIS

**General Comments:** My written concerns, expressed March 23, 1993 during "Public Scoping Comments", still stand. Basically, Forest Service planners decided to facilitate the tourist industry, i.e. Alaska Travel Adventures and similar groups, at the expense of the flora and fauna of the area without regard for local residents' social and economic well-being.

**Specific comments:**

Table S-1, Alternatives - Issue

Motorized Recreation Vehicle Use

- 30.1 I have no objection to limited seasonal use of any portion of the area by O.R.V's and perhaps alternative 3 could, with modifications, cause the least amount of disruption to vegetation and nesting birds.

Table S-1 Alternatives - Firearm Use

- 30.2 Alternative 3 is acceptable. It seems strange that at a time when the state administration, local officials and individuals are extremely concerned about the actions and welfare of young Alaskans that the Forest Service is purportedly favoring eliminating one of the few areas where young hunters can easily access. Perhaps hunting is alien to eastern recreational planners whose emphasis is on tourism?

- 30.3 The area under consideration has been used by hunters for nearly a century. The tradition should continue. There are NO conflicts with other users (tourists) especially during September, October and sometimes early November. Rabbit hunting depends upon a cyclic species mostly absent since about 1982 and should not be a bother during the winter months.

- 30.4 Forest Service representatives have stated that only 58 acres are currently legally open to discharge of firearms because of state and/or borough regulations. Oddly, when questioned neither responsible branches evidenced any interest in eliminating hunting or in enforcing the purported regulations. I suggest the Forest Service should retire and allow local citizen groups such as the Territorial Sportsmen to remove any state or local regulations that may impinge upon the area.

30.1

Please refer to response 1.1, 3.3 and 29.5.

30.2

Please see the Record of Decision for the Forest Service decision and rationale concerning hunting in the Recreation Area. Alternative Six was developed in response to public comments on the Draft EIS. In this alternative Mt. McGil Unit will be open to hunting with shotguns and .22 caliber rifles. The Drake Lakes unit will be open to hunting with shotguns during waterfowl season. Please also see Chapter 4, Issue 2 for analysis of effects.

30.3

Please refer to response above.

30.4

Please refer to response 30.1, and Chapter 4, C. Issue 2 - Firearm Use, Alternative 6. We hope to work with Territorial Sportsmen and other groups resolving the conflicting management strategies of the different agencies.

Table S-1 Alternatives - Fish and Wildlife

30.5 | Alternative 1 - No action. This is the best of the alternatives listed. Some consideration should be given to limiting Alaska Travel Adventure's float trips which could disrupt swallow feeding and tern nesting. Similarly the concept of building a foot bridge across the Mendenhall River should be discarded as it will place thousands more humans in prime waterfowl nesting and feeding habitat.

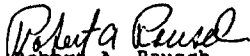
Table S-1 - Alternatives - Commercial Use

30.6 | None of the alternatives are acceptable. There should be no commercial use of the area except for the Visitor Center. Float trips should be capped at no more than 100 people daily with a seasonal limit of 10,000.

Evaluation of E.I.S.

30.7 | Redo it. There are so many contradictory approaches offered without substantiation that the effort miserably fails to properly address the area. The first priority should be to protect and enhance the resources of the area for local use. Tourism is a secondary and inferior use and it should be so considered.

Sincerely,

  
Robert A. Rausch  
PO Box 32662  
Juneau, Ak. 99803

30.5

Please refer to response 17.7. We have no indication that high numbers of people on the river negatively impact the swallows that feed there. The commercial river use will be capped at about 48% over the existing use. See Chapter Three, F. Wildlife, Arctic Terns and Chapter 4, Issue 5 - Fish and Wildlife, for a discussion of environmental effects..

30.6

Please refer to the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision.

30.7

Please refer to the 1996 Management Plan, Overall Management Direction, response 3.5, and the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision.

RANGER DISTRICT

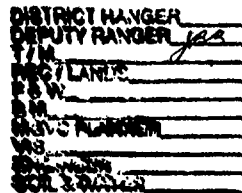
NOV 17 '95

Roger and Linda Harding  
P.O. Box 240463  
Douglas AK 99824

November 16, 1995

Karen Mollander  
District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau Alaska

Dear Ms. Mollander:



We would like to comment on your Mendenhall Glacier Recreation Area Management Plan Draft Environmental Impact Statement. We have used the Mendenhall Glacier Recreation Area and Dredge Lake areas for about 8 years. Specifically, in the last few years we have picnicked, hiked, fished, rode bicycles, cross country skied, and skijored (dog pulling skier). However, we are not using the area anymore due to safety concerns after several encounters with off road vehicles (ORVs).

31.1

While cross country skiing three years ago at Dredge Lakes, my daughter could not get off the trail and was nearly run over by an ORV. Last winter, while skijoring, an ORV passed so close it spooked my dog and nearly caused an accident. While hiking two summers ago, our family was again forced off the road and into the bushes to avoid the fast moving ORVs. Consequently, we no longer take our family to the Dredge Lakes area, instead going cross country skiing at the Mendenhall Campground and skaters cabin area. However, this area was so congested with ORV's and snow machines during a trip last winter that I am not sure we will return there. While skiing on Mendenhall Lake last winter several ORVs went past within 20 to 30 feet of us. In the campground itself, much of the trail had been ridden over by ORV's.

31.1

Please refer to response 1.1, 3.3 and 29.5.

31.2

The ORV users in both the Mendenhall campground / skater cabin and Dredge Lakes area have driven off many people who used to frequent these areas. While I understand the desire of ORV users to have a place to ride, their use of the Mendenhall Glacier Recreation Area is not compatible with many other uses, such as hikers, birders, bicycle riders, and cross country skiers. Simply put, ORV users have driven other Juneau residents away from this area and the area is becoming an exclusive ORV area. Who wants to take their children for a walk or ski in the middle of a ORV race course?

31.2

Please refer to response 1.1, 3.3 and 29.5.

31.3

I am aware of many other "non-safety issues" such as destruction of vegetation and fish spawning areas, and disturbance of nesting birds. These issues provide further support that ORVs should be banned in the Mendenhall Glacier Recreation Area. I request that the USFS reconsider its preferred alternative (no. 4) and adopt Alternative 5 which would prohibit ORV use year round.

31.3

Please refer to responses 1.1 and 3.3.

Sincerely,

*Roger Harding*

Roger Harding

Linda Harding

NOV 17 '95

November 15, 1995

Karen Mollander  
District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, AK 99801

DISTRICT RANGER \_\_\_\_\_  
DEPUTY RANGER MS  
T / M \_\_\_\_\_  
REC / LANDS \_\_\_\_\_  
F & W \_\_\_\_\_  
B M \_\_\_\_\_  
MGVC PLANNER \_\_\_\_\_  
VIS \_\_\_\_\_  
ENGINEER \_\_\_\_\_  
SOIL & WATER \_\_\_\_\_

Dear Ranger Mollander,

I have read the Mendenhall Glacier Recreation Area Management Plan Revision Draft Environmental Impact Statement dated October 1995 and would like to offer a few comments.

I am a neighbor of the Forest Service, living on River Place (a street bordering the Dredge Lakes section of the recreation area). For the past fifteen years I've attended public open houses and comment sessions, called in concerns, sent letters, been involved in neighborhood meetings with the USFS, written articles for the *Trails* newsletter and personally visited with Forest Service employees. I've read the original 1975 MGRA Management Plan and the proposed (October revised) 1995 MGRA Management Plan in their entirety, kept track of the NEPA schedules for the Chatham Area as regards the MGRA and followed most articles and other literature regarding the Recreation Area. To keep this brief and not repeat information I've already submitted (see enclosed copies of past correspondence) please consider the following:

32.1 - I support the stated Overall Management Directive, "To manage for public safety needs first, resource protection second, and compatibility of uses third, while providing recreation opportunities".

32.2 - I strongly object to your Alternative 4 concerning the issue of Motorized Recreational Vehicle Use. Alternative 4 amazingly proposes to confine and condense ORV use into the EXACT area around Dredge Lake and Crystal Lake that has drawn the most concern over the twenty years since the original plan was implemented. Former Ranger Mitchell, who was involved with the original plan, stated that even back in 1975 there were problems and the 1975 plan was a temporary effort to see if ORVs and other recreational uses could be compatible. The intent was to revisit this issue sometime sooner than twenty years later and seek some resolution. Now we are in November 1995 and looking at a situation where the Dredge Lake section of the rec area is being held hostage by a vocal minority of ORV users who use the argument that they have been restricted from "everywhere else" in the community. This may be true for valid reasons, but should never be used as an argument for having to designate an ORV area in Dredge Lakes.

For, at least, the past nine years the Juneau Ranger District has put off dealing with the ORV issue because it wanted to combine it with the Management Plan Revision. As you

32.1

Thank you for your comment.

32.2

Please refer to response 1.1 and 3.3.

know this has been a long postponed process. In the meantime the City and Borough of Juneau has closed several areas to ORV use for many of the same reasons that neighbors and users of the MGRA have stated. The fact that the USFS has been slow in reacting to a comprehensive ORV Plan is not a reason to place riders in the MGRA. There is not a mandate to provide this publicly financed ORV riding area (near housing and schools).

I attended the ORV Workshop last year and listened to the ways ORV users wanted to operate within the rec area. Ms. Burns Buyarski listed these on a flip chart and they included statements such as, "not having to deal with laws or restrictions, letting my machine go all out to see what it can do, not having walkers or other users in my way, feeling speed". I don't see this as being compatible with my family's need to walk, bike, watch the fish and enjoy the silence of being outside.

Did you consider City and Borough Ordinance 42.20.95 - Disturbing the Peace, when you proposed to consolidate ORV use in the area near our neighborhoods? These machines make a lot of noise. You've had much feedback through the years about this continuing problem. Please reconsider.

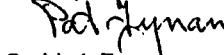
ORV use is not safe, contributes to terrain degradation and diminishes the experience of other users and residents of the Dredge Lakes area. ORV use in the MGRA is incompatible with your stated Overall Management Objective. The MGRA's accessibility to Mendenhall Valley residents and Mendenhall River School students is what makes it such an important part of our community. Don't sacrifice this spot for a few people who want to pursue a recreation that is detrimental to all other uses.

I support Alternative 2 on Table S-1 under the issue of Motorized Recreation Vehicle Use.

*-I support the remainder of the Draft EIS.*

Thank you for the opportunity to comment on this Plan Revision. I appreciate the chance, once again, to advocate for a special and unique area of Juneau.

Sincerely,



Patricia A. Tynan  
8350 River Place  
Juneau, AK 99801  
(907) 789-3909

enclosures (to be part of record)

32.3

Please refer to response 1.1 and 3.3. The closure of most of the Mendenhall Glacier Recreation Area should meet your family's need to walk, bike, watch fish and enjoy the silence of being outside.

32.4

Please refer to response 1.1 and 3.3. It is also possible, to enforce the C and Borough of Juneau Noise Ordinance within the Mendenhall Glacier Recreation Area.

32.5

Please refer to response 1.1 and 3.3. This decision should alleviate your concerns regarding ORV/pedestrian safety and visitor experience.



NOV 17 '95

November 15, 1995

Mendenhall Glacier Recreation Area Planning Team  
USDA Forest Service  
Juneau Ranger District  
Old Dairy Rd.  
Juneau, AK 99801

DISTRICT RANGER \_\_\_\_\_  
DEPUTY RANGER JOB \_\_\_\_\_  
T/M \_\_\_\_\_  
REC/LANDS \_\_\_\_\_  
F&W \_\_\_\_\_  
BM \_\_\_\_\_  
MO/LC PLANNER \_\_\_\_\_  
VIS \_\_\_\_\_  
ENGINEER \_\_\_\_\_  
SOIL & WATER \_\_\_\_\_

Dear Planning Team:

I am responding to your solicitation for comments concerning your comprehensive plan for the Mendenhall Glacier Recreation Area, as described in your draft environmental impact statement.

In general, I support your management philosophy for the area and many proposed actions as described in the preferred alternative. However, there is one issue I wish to address, and that is your proposal to allow continued ORV use in a major portion of the Dredge Lakes Unit. I strongly believe that there are compelling reasons for eliminating all ORV use from the entire Dredge Lakes Unit.

33.1 I enjoy exploring the Dredge Lakes area because it offers opportunities to view species of birds that are very difficult to see elsewhere in the Juneau area. Couple this with the grand scenic backdrop and it can be a fantastic place to visit. I generally lead one or two Audubon Society bird walks each year in the area. The bird walks are quite popular because of the interesting species. However, because of the prevalence of ORVs in the area, I rarely go there except for early morning hours before ORV users are present. The noise from the ORVs is not compatible with locating birds by song or call. Also, you run the risk of being injured from a collision. The latter concern pretty much precludes family outings in the area.

33.2 Choosing not to take my family into the Dredge Lakes area is not really a choice, but rather, in my mind, a preempted opportunity, or opportunity lost for my family because it is simply too dangerous and unpleasant to be there when people are driving ORVs. Unfortunately, many drivers stray from the designated area, and illegally drive where they should not be. Also, there are blind turns or curves on some of the trails near Moose Lake. This summer I did decide to take my younger daughter in with me and I literally had to yank her from a trail as two ORVs came speeding around a curve. Both drivers never slowed, they just smiled. I had similar experiences years ago when my older daughter was quite little. So, the bottom line is that except for my very early morning visits, I avoid the area. The concept of multiple use is not working there.

33.3 I am certain other, nonORV folks, birders and nonbirders, and recreational anglers, also avoid the area. Moreover, I feel strongly that certain planning proposals to develop other recreational opportunities in the unit, such as recreational fishing at Glacier and Moraine Lakes, may be a waste of time if you continue to allow ORV traffic in the unit. Why stock Glacier and Moraine Lakes if, in order to get there you must share the paths and trails with screaming ORVs? I wouldn't. Those lakes might be a great place to take my kids fishing.

33.1

Please refer to responses 1.1 and 3.3. The Record of Decision, including Rationale for the Decision for the preferred alternative prohibits ORV use the recreation area, except for the west side of Mendenhall Lake when it is frozen. This should eliminate the conflicts you describe for bird walks a locating birds by song or call.

33.2

Please refer to response 1.1 and 3.3. This decision should eliminate ORV/pedestrian conflicts in the Dredge Lakes area.

33.3

Please refer to response 1.1 and 3.3. The decision should allow you to take your children fishing in the Dredge Lakes area without encountering ORV use.

but hey, I already have decided it isn't worth taking them there, and I resent it. If the ORVs remain, then I wouldn't be interested in walking in to fish Moraine or Glacier Lake.

33.4

Aside from personal safety and degraded aesthetics from the noise of ORVs, there is also the issue of degraded habitat and lost fish production resulting from ORVs crossing fish streams. Coho salmon and cutthroat trout spawn in reaches of streams crossed by ORVs. The draft EIS even states that there is considerable lost production of coho salmon from this cause. This by itself seems enough to eliminate ORVs from the area, given that recreational uses of the area should be compatible with the natural history.

For the reasons above, please reconsider and change your proposed action allowing ORVs in the Dredge Lakes area and BAN THEIR USE within the entire planning unit.

Thank you for the opportunity to comment.

Sincerely,

*Mark Schwan* *Mark Schwan*  
Mark Schwan  
*Sebastian Ball*  
*JOLIC*

12090 Cross St.  
Juneau, AK 99801

33.4

Please refer to responses 1.1 and 3.3, and those listed above.



NOV 17 '95

DISTRICT RANGER \_\_\_\_\_  
DEPUTY RANGER *jsa* \_\_\_\_\_  
T/M \_\_\_\_\_  
REC/LAN: \_\_\_\_\_  
F&W \_\_\_\_\_  
BM \_\_\_\_\_  
MGVC PLANNER \_\_\_\_\_  
VIS \_\_\_\_\_  
ENGINEER \_\_\_\_\_  
SOIL & WATER \_\_\_\_\_

November 16, 1995

Karen Mollander, District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, AK 99801

Dear Ms. Mollander:

Thank you for the opportunity to comment on the Mendenhall Glacier Recreation Area Management Plan Revision Draft EIS. I am writing in opposition to the placement of finite limits on commercial use.

- 34.1 If there is a difference in the impact to an area based on whether people are brought there commercially or not, then surely the impact of "commercial users" is less. They are transported in fewer vehicles, looked after, picked up after, actively educated, and safely escorted from the area.
- 34.2 There is no demonstrated basis for distinguishing between commercial and non-commercial users and limiting the former.
- 34.3 There is no demonstrated basis for the determination of the finite numbers the MGRA Plan Revision would impose on commercial users. The numbers are incredible. A limit of 24 or 48 persons per day on a public trail? Because they paid to be guided?
- 34.4 Those trails were paid for with public dollars. The people who want to walk on the trails and visit MGRA facilities helped to pay for them, and may have just one chance in their lifetime to experience them. The vast majority of summer visitors wanting to access the MGRA commercially fall within a demographic range that has spent years paying taxes to support public lands across the nation. They are willing to help to maintain and upgrade them through the commercial permit fees you collect.
- 34.5 The emphasis of the Management Plan should be on developing facilities and trails to accommodate the demands of the public. The public owns the Mendenhall Glacier Recreation Area. The MGRA was set aside to educate and provide recreation for the public. The public should have the right to choose commercial access to the area.

34.5  
369 South Franklin  
Suite 201  
Juneau, Alaska  
99801  
(907) 586-1737  
(907) 586-1449 FAX

34.1

Public transportation and private motor coaches do transport a greater number of visitors with fewer impacts (i.e., fewer vehicles), however, the increasing number of visitors brought out to the Recreation Area has generated public concern. Please refer to responses 3.5 and 4.9.

34.2

Please refer to response 8.3. Also refer to the Record of Decision, description of the Forest Service selected alternative and rationale for the Decision. Commercial use levels for the Visitor Center have been calculated to not exceed facility design capacity, reflect public concerns, and to meet the desired future condition for the Visitor Center Unit, and the Mendenhall Glacier recreation area. The decision provides for controlled growth of the visitor capacity over the next several years. Analysis of effects are included in Chapter 4, Issue 3 - Commercial Use.

34.3

Please refer to responses 3.5, 21.3 and 21.9. Also, please refer to Record of Decision preferred alternative, Rationale for the Decision and the description of Monitoring Measures. Analysis of effects are included in Chapter 4, Issue 3 - Commercial Use.

34.5

Commercial use is considered a significant issue in this document (see Chapter 1, Issue 3). The idea of capacities developed in this plan is that visitors receive a quality experience when they visit the Mendenhall Glacier Recreation Area, consistent with the desired future condition. Trail and facility development is a part of the Record of Decision and of the Recreation Area Plan (see Record of Decision, Recreation Area Plan and Appendix B, List of Proposed Projects). The Record of Decision allows for controlled commercial growth for the next several years, in all areas where capacity limits are being established.

The Record of Decision also allows for commercial use of the Mendenhall River and Mendenhall Lake above the National Forest Boundary. For a discussion of the impacts of this use, see Chapter 4, Issue 3, Alternative 6.

34.6 Commercial operators help the U.S. Forest Service; they oversee the health and safety of their clients, protect the renewable resources adjacent to trails and facilities through education and setting standards ("rules of the road"), and impart a sense of order to high impact areas. Why would the Forest Service want to limit revenues and assistance from these important intermediaries?

34.7 The MGRA facilities, particularly the Visitor Center, are strained. A new Visitor Center should be the top priority, in order to accommodate public demand. The overall number of visits to the Mendenhall Glacier Recreation Area is not large by national standards, particularly for an area so large in size with such a unique educational opportunity to offer.

34.8 In the short term, longer hours might help spread traffic and reduce peak demand crunches at the Visitor Center during the summer. Perhaps the enforcement personnel called for in the Plan Revision could be hired to man the Center instead, and allow for evening access May through September. Or perhaps the associated funds could be used to get started on one or more of the many much-needed "funding dependent" developments cited.

The commercial capacity constraints recommended in the MGRA Management Plan Revision are not in the best interest of the tax-paying public, nor are they in the best interest of the Mendenhall Glacier Recreation Area.

Sincerely,



Karl Westlund  
President/CEO

cc: JCVB Board of Directors  
Senator Frank Murkowski  
Senator Ted Stevens  
Congressman Don Young

34.6

Many commercial operators do oversee the health and safety of their clients and are sensitive and conscientious about their impacts to natural resources, trails and facilities. Where the difficulty lies is that the total number of visitors on a site at one time, exceeds design capacities and/or diminishes the recreation experience, and can negatively effect a visitor's experience. The existing Visitor Center was designed to accommodate 36,000 people a year. The Visitor Center now receives over 38,750 people on commercial tours a month during the busy summer tour season. As visitor numbers continue to increase, there will be more impacts and degradation of the recreation experience.

To meet the desired future condition for the area and to respond to public concerns (both for and against increased commercial use), we developed a capacity analysis. This analysis looked at recreation experience to be provided and site capacities at the Visitor Center, Mendenhall Lake, Mendenhall River, West Glacier Trail, Moraine Ecology Trail, East Glacier Loop Trail, and Nugget Creek Trail. For many visitors to the Recreation Area, tours are the only way that they will be able to visit or experience their National Forest. By concentrating commercial use to certain areas and allowing commercial use up to a designated capacity level, we hope to retain the undeveloped character of this recently deglaciated landscape, while still allowing room for growth and new commercial opportunities.

Regarding revenues, please refer to response 16.2, 16.7, and 23.2.

The Forest Service's intent is to manage for the desired future condition, not to "limit commercial use" or "revenues." Site capacity determinations and commercial use allocations are part of managing the area as a whole in order to meet the desired future condition for the area.

34.7

The Mendenhall Glacier Visitor Center expansion project is a top priority for the Forest Service, especially in light of an aging, stressed facility and increasing tourism growth projected for the years ahead. The funding to begin construction however, has not yet been allocated by Congress. Please refer to response 23.2.

34.8

Law enforcement personnel, while they will be working out at the Visitor Center, their efforts and focus need to be on the illegal activities taking place throughout the Juneau Ranger District, including the Recreation Area. Additionally, please refer to response 23.3.



P.O. Box 20761, Juneau, Alaska 99802  
JUNEAU  
RANGER DISTRICT  
Phone/FAX (907) 789-2399

NOV 17 '95

November 17, 1995

Karen Molander  
District Ranger  
Juneau Ranger District  
Tongass National Forest  
8465 Old Dairy Road  
Juneau, Alaska 99801

DISTRICT RANGER  
DEPUTY RANGER J223  
T/M  
REC/LANDS  
F&W  
B M  
MGT/C PLANNER  
VIS  
ENGINEER  
SOIL & WATER

Dear Ms. Molander:

We have reviewed the Mendenhall Glacier Recreation Area Management Plan Revision Draft Environmental Impact Statement (DEIS). We feel that you have not addressed our concerns for continued hunting in the Dredge Lake unit. It appears your using safety as a reason to ban hunting in the unit. However, you are allowing the use of ORV's which we feel presents a greater safety hazard to the public.

Enclosed is a copy of are original comments please take them into consideration in your final discussion.

Thank you for this opportunity to participate in the review of your management plan.

Sincerely,

Rick Bierman  
President

Enclosure (1)

35.1

Please see the Record of Decision for the Forest Service decision and rationale concerning hunting in the Recreation Area. Alternative Six was developed in response to public comments on the Draft EIS. In this alternative Mt. McGinnis Unit will be open to hunting with shotguns and .22 caliber rifles. The Dredge Lakes unit will be open to hunting with shotguns during waterfowl season. Please also see Chapter 4, Issue 2 for analysis of effects.

For comments about ORV's please refer to comments 1.1 and 3.3. The Record of Decision prohibits use of ORV's in the recreation area, except for on the west side of Mendenhall Lake when it is frozen.

ORV USE

Although in an ideal situation, continuing present ORV legal use as revised by plan would be reasonable, I now oppose it for reasons herein discussed. I believe it is irresponsible to discuss "Mitigation and Monitoring" (P. 2-17) in only a hypothetical way, as if there is, and will be little problem controlling illegal activity. "Voluntary ORV patrols", while a great idea in theory, suggests a world of your dreams. Remember that those ORV users sympathetic to a fair split are not the cadre of per ennial and all-too-knowing lawbreakers and vandals of signs and notices. Considering how controversial the problem is, you need to be honest, and discuss the real-world problems the Ranger District now has and will have (especially given Congressional budget tightening) in controlling illegal use. This is due to (1) lack of dollars, and (2) lack of law enforcement manpower needed to get this one area under control. If politics requires you basically to continue the status quo, at the very least, you must provide a full real-world, honest discussion of your enforcement difficulties. You admit that regular patrols for such control would be a lower priority than safety or damage to resources - though note the wetland and beach damage now occurring severely near Mendenhall lakeshore. You place law enforcement merely as "priority 4" (P. 2-2).

I suggest, now, putting up a lengthy chain-link fence with gate wide enough to walk through, across the primary access route south of Norton Lake.

Let me again remind you of the '75 Plan statement, "If this direction does not resolve off-road motorized vehicle conflict, the entire Recreation Area should be closed to off-road motorized vehicles." If 20 years isn't enough time to get results, what is?!

FIREARM CLOSURE

I support the preferred alternative. Note, however, that during the fall, you should have patrols (for safety!) in the current Moraine Lakes Unit (proposed "Roaded-Natural"). I find it bizarre that zero reports of illegal firearm use have been reported from this unit. I find fall hunting quite common in the unit, especially the western portion. Much of the current hunting is for Snipe, which you don't even mention. Continual plinking also is not infrequent, just as in the current Dredge unit. If safety is your primary concern, this illegal use needs to be controlled. The map on P. 2-3a means nothing in relation to actual use. P. 4-7 ff needs to discuss the problem of continual series of random plinking. I believe the occasion in which 2 bullets whistled by my head was during that type of activity. I was told in the 60s of a then-recent case in which a woman was injured (not seriously) by being shot in the Rec. Area.

WILDLIFE

More discussion is needed, recognizing current trends, e.g. the sensitive Least Sandpiper, formerly nesting all along the lakeshore, has disappeared in the past 5 years. Red-Throated Loons, which reared broods every year for decades, has had little success in the 90s, and the one or two pairs now present seem to wander from lake to lake. In particular, the flats and marshes along the south Mendenhall shore are heavily impacted, especially by ORVs, and all waterbird species (except the invading Killdeer), have decreased there in recent years. The Forelands south from Mendenhall Lake are regularly used each fall by Goshawks, a sensitive species. This fact also should be discussed.

36.1

Please refer to response 1.1 and 3.3. Law Enforcement efforts will be made much easier by this decision because a majority of the Mendenhall Glacier Recreation Area will be closed to ORV use.

36.2

Thank you for your comment. Based on the Record of Decision (see 1.1 and the Record of Decision) a chain link fence would not be necessary and not part of this decision.

36.3

You are correct, illegal use of firearms, e.g. "plinking" is of concern, but a separate activity from authorized hunting. The Record of Decision supports legal hunting practices on Mt. McGinnis, and waterfowl hunting in the Dredge Lakes unit. Please refer to Chapter 4, C. Issue 2 - Firearm Use.

36.4

This information is discussed in more detail in the Wildlife Resource Report and is available at Juneau Ranger District in the Planning Record. Trend information was added to Chapter 3, section F. Wildlife. A discussion on goshawk use of the area is included in the Biological Evaluation which is located in the Planning Record. This information was not included in the EIS because it was not part of a significant issue analysis. Also see the Chapter 4, Issue 5 - Fish and Wildlife for the analysis of effects. Based on your comments, and our own field review, we have modified the shorebird protection measures for the south and east shores of Mendenhall Lake.

36.4 Tern and Semipalmated Plover nesting. However the one-mile beach is currently used only by Spotted Sandpipers and 1-2 pairs of Semipalmateds. Since 1966 at least, there have been no terns along that beach nesting. Tern Island had up to 7 nesting pairs in the 60s and 70s, but that has gradually decreased. In recent years, no terns have nested on the island (the odd tern still surveys it, but no defending of territory anymore). This is in part or mostly due to significant siltation, which in recent years has built up to the point where the "island" has a dry connection with the mainland until half way thru the nesting season, thus allowing predator access. This west beach is now decidedly less productive for waterbirds than the south beach, deteriorating though the latter is. It makes no present biological sense to close the west beach to spring public use.

36.5 While I support fishing improvements, I urge against any change in Norton Lake which would attract additional human activity. Norton is the best waterbird producer of all the ponds (along with nearby Louie), and should be left undisturbed.

36.4 Please add to P. 3-5, Waterfowl, that interior ponds also provide regular brood-rearing for Ring-Necked Ducks and Hooded Mergansers, both secretive at that season.

36.6 What is the "Tern Rock" you refer to? Tern "Island" is not rocky. Terns do nest on the rock bluff above the north shore, but so do gulls.

WILDFLOWERS

36.7 You should add to the EIS the important fact that the outwash flats and upper beach areas along the Mendenhall shore are very significant for quite a number of normally-subalpine plants (list attached). The ORV activity along the south shore, especially in the last few years, is impacting them. There are also arctic/alpine grasses and mosses present locally in the ecotype (contact Rita O'Clair).

TRAILS

36.8 The proposal would upgrade trail maintenance levels on Dredge area trails from 1 to 2. This is fine, except that the one north-south through trail around Moraine Lake would for certain be used for "illegal" ORV access (it occasionally is at present) if it were upgraded. The odd planking and minor brushing of recent years is fine, but any improvement, especially north from Moraine Lake to the east-west cross trail (recently much improved) would make even worse the already-miserable ORV situation in the northern Moraine Lakes Unit.

36.9 A bulldozed track was recently pushed from Glacier Spur to the pitted outwash flats near the Moraine Ecology Trail, with no public notice. I strongly urge that you follow your own directives and provide NEPA public involvement before any future significant trail construction or improvement.

36.10 You should consult with knowledgeable year-round users like me before planking/bridge building. Some years back, FS planked the north shore of Moraine Lake; within 5 years, many of the planks had floated away. Quite recently, FS built a plank-bridge from the northwest corner of Moraine Ecology Trail to access the beach. I approve, but it too was done improperly. In the next major fall flooding, it floated away, and is now just an eyesore on the open flats. Such planks need to be very firmly anchored. By Mendenhall Lake and River, such fall flooding is a fairly common occurrence, and must be prepared for.

36.5

The Forest Service has no plans to create a sport fishery in Norton Lake.

36.6

This was a editing error. It should read "tern island" instead of "tern rock". The correction has been made.

36.7

New information was added to Chapter 3, D. Vegetation. A new section was also added to Chapter 4, G. Other Resources.

36.8

See 1.1 and 3.3. ORV use will be prohibited in this area (see Record of Decision).

36.9

The track to which you refer was an investigative project done by the Forest Service which involved core drilling to gather information for the Steep Creek Interpretive Trail and Fish Viewing Facility. An environmental assessment was completed after an inclusive public involvement process. From this Environmental Assessment, a decision to implement this project was made by the Chatham Area Forest Supervisor in a Finding of No Significant Impact on September 15, 1992.

36.10

All trail construction is completed to Forest Service National and Regional trail engineering specifications. Occasionally in unique conditions, these specifications are inadequate, and we are open to suggestions from local experts. We are reviewing this structure and plan to repair it so that it will not be impacted by flooding. Such repair is consistent with this decision.

#### PERMITS

36.11 You should allow for birdwatching use of the Rec Area, including parking lots, during the bird-nesting season, from daybreak on. Several years ago, I verbally requested a permit for studying birds, but heard nothing further.

#### DOGS

36.12 Recently, while standing still along the beach near the mouth of Steep Creek, I was approached and bitten by a German Shepherd, within sight of its owners (about 60 yards).

#### COMMUNICATIONS

36.13 I wish to protest most strongly the totally inadequate communication from the FS regarding opportunities for public input on this plan revision. Since the '75 plan was adopted, I've submitted various comments in writing, and had virtually annual discussions with RD Recreation people. I requested numerous times to be put on any mailing list assembled for plan revision. Yet, despite FS sending several hundred notices in spring '93, I was not sent one. I infer they were sent to officials and representatives of organization, rather than the interested public. In this case, I found out from the Empire.

But I was recently told of enormous ORV support and little opposition (contrary to the DEIS record of earlier input) at an ORV Workshop in January '95. No doubt you met your legal notification requirements. But again I was left out, and missed out. You have no right to expect people to go thru all the Empire notices, day in and day out. The RD does a good job of keeping me informed of actions and meetings on various other projects - why not this one on my doorstep?!

36.14 Since the EIS is incredibly confusing between "Proposed Action" Alt. 2 and "Preferred Alternative" 4, and at least by omission seems to exclude from meetings those opposed to ORV use on the Rec Area, I very strongly urge that the Ranger District (1) hold at least one workshop on that subject for which you do inform by letter interested members of the public, and (2) prepare a brief supplement and detailed map to the DEIS, explaining clearly what you propose to do, as well as discussing my complaints above under ORV section.

*Richard J. Gordon*

36.11

Please refer to the Record of Decision, Description of the Forest Service preferred alternative. We need to strike a balance between protection of recreational facilities from vandals, and keeping the area available for legitimate recreation use. For those who want to be in the Recreation Area after closed hours (for birding, research activities, etc.), authorization be obtained.

36.12

Dogs must be on leash while in a developed recreation site, and under voice control when outside of a developed recreation area. Please contact Forest Service personnel if you are in a situation where a dog is threatening or attacks you. In addition, the City and Borough of Juneau have an ordinance holding dog owners responsible, if their dog harms someone.

36.13

The ORV workshops were announced through public service announcements in Juneau's media, including television, radio, and newspaper. Your name has on our mailing list since we began public mailings in May, 1993.

36.14

Please refer to response 3.2. In addition, please refer to the Record of Decision, Description of the Forest Service preferred alternative.





155 SOUTH BEWARD STREET  
JUNEAU, ALASKA 99801

Karen Mollander  
District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, Alaska 99801

SUBJECT: Mendenhall Glacier Recreation Area Management Plan  
Revision DEIS

Dear Ms. Mollander:

Thank you for the opportunity to comment on the DEIS for the Mendenhall Glacier Recreation Area Management Plan Revision (hereafter "DEIS"). We will take this opportunity to restate a concern which was transmitted to the Forest Service earlier with respect to the proposed Management Plan.

In a letter of January 18, 1995, Ernie Mueller, Public Works Director, stated that the City and Borough of Juneau (CBJ) was interested in obtaining easements or other agreements which would allow the construction of cul-de-sacs at the end of five residential streets which terminate abruptly at the USFS property line. These streets are Terrace Place, Dredge Lake Road, Gladstone Street (at two locations) and Trafalgar Avenue. He explained that the lack of turnarounds is a significant public safety concern, particularly for emergency vehicles and street maintenance equipment servicing these streets.

The Forest Service responded to our letter by including this concept in Alternative 3, under "Other Access Points." There seems to be a misunderstanding here: we did not propose the cul-de-sacs as a method for increasing access to the area. We proposed the construction of cul-de-sacs so that emergency vehicles and others can safely turn around on these streets.

In Chapter 4, Environmental Consequences, the DEIS notes that the turnarounds would provide greater parking access to the area and would hence generate increased noise, traffic and safety concerns for residents. Again, it was not our intent to provide parking. Additionally, the traffic concerns raised in the DEIS can be addressed by restricting parking in the cul-de-sacs. We are interested in maintaining full use of the cul-de-sacs for their

NOV 17 '95

November 17, 1995

File No.: AK9412-147M

DISTRICT RANGER *RM*  
DEPUTY RANGER *JS*  
REC/LANDS  
F&W  
BM  
MGVC PLANNER  
VIS  
ENGINEER  
SOIL & WATER

37.1

In alternative 6 in Chapters 2 and 4, these cul-de-sacs are for emergency vehicle access only. No public parking would be allowed. Please refer also to the Record of Decision, Description of the Forest Service preferred alternative.

37.2

Please refer to Chapter 4, E. Issue 4 - Access, Alternative 6 has been added and it to reflects your comments.

37.1

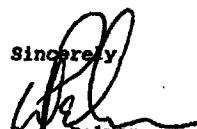
37.2

Karen Mollander  
File No. AK9412-14JJ  
November 17, 1995  
Page 2

- 37.2 | intended purpose for emergency vehicle turnarounds, and are  
| agreeable to restricting parking in the cul-de-sacs.
- 37.3 | Each cul-de-sac should be constructed to meet the CBJ standard of  
| a 40 foot radius. Thus, we are looking at easements for about  
| 25,000 square feet of USFS property within the 5,815 acre  
| Recreation Area.
- 37.4 | We believe this is a good opportunity to work together to enable  
| increased fire protection and other emergency services to  
| residents of these streets. We encourage you to amend the  
| preferred alternative to provide for these cul-de-sacs.

If you have any questions or need any further information, please  
contact Ernie Mueller at 780-6888. We look forward to further  
discussions of our proposal.

Sincerely



Dave Palmer  
City Manager

cc: Ernie Mueller, CBJ  
Bill Ellis, CBJ  
Terry Brenner, CBJ  
Bob Millard, CBJ

37.3

In Alternative 6, in Chapter 2, C. Alternatives Considered in Detail, the  
cul-de-sacs are described as having a 40 foot radius.

37.4

Please refer to the Record of Decision, Description of the Forest Service  
preferred alternative.

NOV 20 '95

## Gray Line of Alaska

Wednesday, November 15, 1995

Ms. Karen Mollander  
District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, AK. 99801

DISTRICT MANAGER  
DEPUTY RANGER *JS*  
T/M  
REC/LANDS  
F&W  
B.M.  
M/C PLANNER  
VIS  
ENCLOSURE  
SOL. 2. VETER

Dear Ranger Mollander,

I am writing to request an extension for our draft comments regarding the Mendenhall Glacier Recreation Area Management Plan Revision.

38.1

As you can likely expect, Gray Line and Holland America Line, have specific views and thoughts regarding the various alternatives addressed within the plan. Our main interest is the preservation of the environment balanced skillfully and objectively with the desires of visitors to experience it's grandeur. Holland America Line understands the difficulty balancing multiple needs and wants can be. We strive to allow our guests to experience the local community with as little negative impact on the residents as possible. A difficult task.

38.2

Holland America Line has experienced a good relationship with the USFS statewide. We have been at the forefront when special projects need funding or visitor needs require addressing. We strive to abide by both the letter and intent of USFS regulations. The commercial use of USFS lands is an important issue to Holland America Line and we appreciate your patience and willingness to review our position.

Thank you for your consideration.

Sincerely,



Chuck Acker  
Director Safety, Training &  
SE Alaska / Yukon Operations

CC: Gordon Barr, Vice President Transportation Division  
Ken Bechtel, Juneau Division Manager  
Bob Blasco, Esq. Robertson, Monagle & Eastaugh

300 Elliott Ave. W. Seattle, WA. 98119 (206) 281-0578 Fax (206) 270-6045

38.1

Thank you for your comment. Our intent is similar. Please refer to the 1996 Management Plan, Overall Management Direction and Desired Future Condition.

38.2

Thank you for your comment.

RANGER DISTRICT

NOV 20 '95

DISTRICT RANGER  
DEPUTY RANGER *163*  
T/M  
REC/ LANDS  
P & W  
S M  
MOVC PLANNER  
VIA  
ENGINEER  
SOIL & WATER

RECEIVED

NOV 20 1995

Juneau Ranger District

November 17, 1995

Ms. Karen Mollander  
District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, AK 99801

REF: Mendenhall Glacier Recreation Area Plan

Please consider the following comments in your review of the various proposals for the revised plan for the area.

Motorized Recreation Vehicle Use

- 39.1 I concur with proposed action in alternative #2. I would suggest that motorized boats be limited to 9.9 hp. This will provide mechanical power for watercraft movement, but will control the temptation to launch a high speed, high horsepower speed boat such as occurs at Auke Lake. I also would recommend the prohibition of jet skis. In a summary, watercraft speed on the lake needs to be carefully controlled.

Firearm Use

- 39.2 I would like to see the use of firearms left as is. There are very few places on the Juneau road system that provide the ease of access found in the Mendenhall Lake area. The timing of hunting season does not conflict with the density of tourism in summer months. If the "no action" alternative is not acceptable, then I would support alternative #4 over the other alternatives.

Commercial Use

- 39.3 I support alternative #4.

Access

- 39.4 I would support either alternative "2" or "3". Developed access is much easier to manage and control. There is no way to avoid the pressure that growth in tourism and local resident use will bring on the area.

39.1

See 1.1 and 3.3. The Record of Decision will prohibit motorized boats and skis on Mendenhall Lake (see Record of Decision, Recreation Plan and Chapt Issue 1, Alternative 6).

39.2

Please see the Record of Decision for the Forest Service decision and rati concerning hunting in the Recreation Area. Alternative Six was developed response to public comments on the Draft EIS. In this alternative Mt. McG: Unit will be open to hunting with shotguns and .22 caliber rifles. The Dr Lakes unit will be open to hunting with shotguns during waterfowl season. Please also see Chapter 4, Issue 2 - Firearms, for analysis of effects.

39.3

Thank you for your comment. Please refer to the Record of Decision, Description of the Forest Service preferred alternative and Rationale for + Decision for a description of our preferred alternative and our reasons for selecting that alternative.

39.4

Thank you for your comment.

Fish & Wildlife

39.5

I support alternative "2". The words "monitor and protect" leave a lot of room for interpretation from all users of the resources. The key thing is to not duplicate government management of certain aspects of the plan. Let Alaska Dept. of Fish and Game be the professional advisors of how best to manage the area.

39.6

Overall, my biggest concern will be the enforcement of the new rules and regulations. With all the cuts in budgets, I am very concerned that some users will disregard any or all portions of this plan and the resources continue to be over utilized and most of the written parts of this plan will be ignored. Since this area is one of the highest usage in the entire borough, it would be useful to address how the new plan will be introduced to the community. Residents using the area will have to be your best source of manpower to know, understand and report violations, but the word must first get out.

Thank you for the opportunity to comment on the draft plan.

Sincerely,



Errol D. Champion  
P.O. Box 33066  
Juneau, AK 99803

*I was travelling last week and couldn't get this  
in your hands by the 17<sup>th</sup>. I hope this isn't too late.*  
*Errol Champion*

39.5

By stating that we will monitor and protect sensitive areas gives the Forest Service a wide range of options if problems develop. The Forest Service will work with experts outside our agency in identifying problems and developing solutions to protect the fish and wildlife habitats within the Recreation Area.

39.6

Law enforcement efforts will be a function of appropriated budget, however it is anticipated that enforcement will be at a higher level because Juneau Ranger District now has two full time law enforcement officers.



## ALASKA DISCOVERY

Dedicated to the Enjoyment & Conservation of Alaska's Wilderness • Since 1972

RANGER DISTRICT

NOV 20 '95

Karen Mollander, District Ranger  
US Forest Service  
8465 Old Dairy Rd.  
Juneau, AK 99801

DISTRICT RANGER  
DEPUTY RANGER JCS  
T/M  
REC/LANDS  
F&W  
BM  
MOVC PLANNER  
VIS  
ENCLOSURE  
SOIL & WATER

November 16, 1995

### RE: MENDENHALL GLACIER R.A. MANAGEMENT PLAN REVISION

Alaska Discovery supports the overall objectives and direction of the revision, and commends your staff on preparing a clear, easily-understood and informative draft EIS. A few specific comments follow:

#### SIGNAGE

We cringe at the thought of more signs, especially those along the lake shore used to warn people of where to go and not go. The current large orange signs used to post an imaginary line dividing the east/west lake are egregious to photographic and scenic purposes. They are big and ugly and the sign is visible from a much longer distance than are the letters, so the signs impact the view of the majority of people, whereas only a few people get close enough to read them.

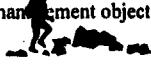
We recommend that signs at trailheads, along the lake, and in front of the glacier be small in size and painted brown. They can still be readily visible and easily read by those walking within 50 yards or so, which will serve their intended purpose without cluttering the otherwise pristine viewscape.

#### MENDENHALL LAKE COMMERCIAL USE

1) Action Item #14 page 18 and #4 page 27: Add "non-motorized" when speaking of allowed commercial uses on Mendenhall Lake and River (summer or winter), to make it clear that only non-motorized commercial uses will be allowed, even in winter.

2) Specify commercial use of Mendenhall Lake in summer is limited to kayak/canoe/raft. This would make it clear that commercial sailing, windsurfing, bike-pedal watercraft, and other non-traditional and purely sports-oriented commercial uses of the lake would not be allowed.

3) Capacity Limits: The plan does not state if "six people per group" is an example or the absolute group size, and it is not clear whether this includes guides (it seems to include only customers). It would be better to establish a group size limit that would apply to any group, including guides, and then have a daily limit (which would also give you a maximum seasonal limit). The groups size and daily limits are of most concern to commercial operators (for economic reasons) and to the recreating public (for impact reasons), and thus should be the focus of management objectives.



5449 STEVENS DRIVE, SUITE 4 • JUNEAU, ALASKA 99801 • ADMINISTRATION: (907) 780-6505 • RESERVATIONS: (800) 586-1911 • TELEFAX:

40.1

While the orange signs near the glacier face are rather obtrusive, they are, in order to warn people of the dangers of falling ice from the face of the glacier. The signs will be moved closer to the glacier face, however, as the glacier has retreated since these were originally placed. In order to effectively warn the public of the potential dangers of calving ice (especially for visitors who have no idea that a glacier can calve without warning or there can be a large wave as a result), we will need to keep the signs a color that will not blend into the landscape.

40.2

Signs at all trailheads will be kept to the smallest size possible that will still allow us to post needed trailhead information. Interpretive signs at the Visitor Center will be various sizes, depending on the location, however, they will be sensitive to creating too much of a "signpost forest".

For the Recreation Area, a special color scheme of gray and blue (to correspond to the glacial features) is used for most of the signs posted. Please see response 40.1 regarding the warning signs near the face of the glacier.

40.3

In the alternative selected in this decision, motorized boats (except for administrative and emergency use) are not allowed on Mendenhall Lake. Please refer to the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision. Motorized ORV or snowmobile may also occur on the west side of Mendenhall Lake when it is frozen.

40.4

Commercial use of Mendenhall Lake or River may include "non-traditional" propelled watercraft, as long as they meet commercial use criteria. (See Chapter 2, alternative 2 Proposed Action for a description of the commercial use criteria).

40.5

Capacity limits were determined using recreation opportunity spectrum guidelines, which determine capacity by number of daily encounters with groups. Group size is based on your comment, maximum group size has been changed from 6 people to 12 people, including the guide. Additional information on capacity determinations is available in the capacity analysis resource report. If you would like to review this document it is filed in the Planning Record at the Juneau ranger district.

40.6

This change has been made as this would not affect the recreation experience being managed for on the lake (Semi-Primitive/Non-Motorized ROS class which allows for less than 10 encounters a day). Additional information on the capacity analysis is available as a resource report at the Juneau Ranger District.

Please refer to the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision for a description of our preferred alternative and our reasons for selecting that alternative.

40.7

Commercial rafting and kayaking launch conflicts will be addressed in the permitting process through the company's operating plans. It is within the purview of this Record of Decision to do this. The sandy beach and the parking area you describe are in the vicinity of the Mendenhall Glacier Campground Road. The Record of Decision closes this area to commercial use.

40.8

See the Record of Decision. Short stops on the beach in this area could be part of the special use permit authorizations, however, the locations and times of these stops will be designated in the Special Use Permit Operating Plan.

40.6 We recommend the group size limit for Mendenhall Lake be set at 15, including guides. Since 12 is the normal group size limit for Wilderness, using 15 for canoe/kayak tours on the Lake would allow, for example, for 12 customers and 3 guides.

We recommend the daily limit for commercial tours on the Lake be set at 24 visitors. This conforms to your seasonal goal of 2930 visitors, but makes it clear that only 24 can be guided on the Lake in one day. (With the group size of 15, this means that you would likely have 2 commercial outings per day, as opposed to the 4 currently envisioned in the plan. It is better to allow from 2 larger groups than 4 tiny groups, since the visitor experience will be better on a longer guided trip (4 hours instead of 2 hours), and there will be less time in the parking lot and on the beach to impact other users.)

40.7 4) Kayak Launching area. The issue of where to allow kayaks to launch for the allowed level of commercial use is not addressed in the plan. From experience I know it is a problem. Because the commercial launch area by West Glacier Trail is so heavily used by ATA for raft trips, it is not feasible for another operator to use the same site. For example, last summer when attempting to drive a kayak trailer to this launch site to take cruise ship customers on a lake kayak trip, we found that ATA occupies this site for at least 2 hours at a time. Since we both service the same customers (off the cruise ships), the timing is always the same. Therefore, we had to use the beach sandy immediately south of Skaters Cabin. This is a difficult place to carry kayaks to. However, it is an excellent launching beach, and it does not appear to get much public use.

We recommend that a parking pad for a kayak trailer be put in about 50 yards down the campground access road on the low piece of land next to this sandy beach, and this area be designated for commercial kayak launches. An operator could back the trailer on this parking pad, unhitch it, and park the van at Skaters Cabin. Guides could have a short carry with the boats and equipment to the beach. The whole operation would be out of the traffic flow. This would prevent greater congestion at the raft launch pad and West Glacier Trailhead Parking lot, which is already a problem.

This site would also make it easier for campground visitors to participate on the kayak tour. We have discovered there is a high interest in this, since people staying at the campground would love to experience kayaking on the Lake.

40.8 5) Northwest Lake shore access. Kayak trips need a place to stop and let people stretch their legs. Visitors are also eager to go ashore and witness some of the glacier features. The northwestern corner of the Lake has an ideal beach for going ashore, and walking along the gravel/bedrock terrain that stretches along this section of the lake. Alaska Discovery has always taken people ashore in this area, and this should continue to be included as part of any kayak operations. Very little hiking traffic is encountered in this area due to its difficult access, and it is far from the arctic tern nesting areas.

Thank you,

  
Ken Leghorn  
co-owner

Juneau Pen  
8465 Old  
Juneau, AK  
99801

To Whom it may Concern

I think the USFS preferred plan of  
Alternative 4 looks OK.

41.1 The only possibility that concerns  
me is the 2 guiding applications  
for ① motorboat tours and the ② Barge  
to the Glacier front.

I do not feel these would be  
good for the area.

JUNEAU  
RANGER DISTRICT

NOV 21 '95

DISTRICT RANGER \_\_\_\_\_  
DEPUTY RANGER \_\_\_\_\_  
T/M \_\_\_\_\_  
REC/LANDS \_\_\_\_\_  
F&W \_\_\_\_\_  
B.M. \_\_\_\_\_  
MG/C PLANNER \_\_\_\_\_  
VIS \_\_\_\_\_  
ENGINEER \_\_\_\_\_  
SOIL & WATER \_\_\_\_\_

Thank you  
Burt & Connie Nelson

41.1

Thank you for your comment. Under the alternative selected in the Record of Decision, motorized boat tours would not be allowed in the Recreation Area. Please refer to the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision.





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10  
1200 Sixth Avenue  
Seattle, Washington 98101

Reply to  
Attn of: WD-126

NOV 21 1995

REF: 95-084-AFS

Karen Mollander, District Ranger  
Juneau Ranger District - Chatham Area  
Tongass National Forest  
8465 Old Dairy Road  
Juneau, Alaska 99801

Dear Ms. Mollander:

The Environmental Protection Agency has reviewed the Draft Environmental Impact Statement (DEIS) prepared for the proposed **Mendenhall Area Management Plan Revision** in accordance with our responsibilities under the National Environmental Policy Act and Section 309 of the Clean Air Act. Our review has revealed no potential environmental impacts that would require substantive changes to the proposal. As a consequence, we are assigning a Lack of Objections (LO) rating to the proposal. This rating will be published in the Federal Register. For your reference, I have attached a copy of the rating system used in our evaluation of the DEIS.

Thank you for the opportunity to review the DEIS. Should you have any questions about our review, please feel free to contact me at (206) 553-8561.

Sincerely,

*William M. Ryan*  
William M. Ryan  
Environmental Engineer

JUNEAU  
RANGER DISTRICT

NOV 27 '95

Enclosure

✓DISTRICT RANGER *KRM*  
✓DEPUTY RANGER \_\_\_\_\_  
T/M \_\_\_\_\_  
REC/LANDS \_\_\_\_\_  
F&W \_\_\_\_\_  
BM \_\_\_\_\_  
MGT PLANNER \_\_\_\_\_  
✓VIS. *John* \_\_\_\_\_  
ENGINEER \_\_\_\_\_  
SOIL & WATER \_\_\_\_\_

SUMMARY OF THE EPA RATING SYSTEM  
FOR DRAFT ENVIRONMENTAL IMPACT STATEMENTS:  
DEFINITIONS AND FOLLOW-UP ACTION \*

Environmental Impact of the Action

LO--Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC--Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA intends to work with the lead agency to reduce these impacts.

EQ--Environmental Objections

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU--Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1--Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2--Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3--Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment

NOV 27 '95

November 22, 1995

DISTRICT RANGER  
DEPUTY RANGER  
T/M  
REC/LANDS  
F&W  
B/M  
MGR/PLANNER  
VIS  
ENCL/EN  
SOIL/ANALYST

Ms. Karen Mollander, District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, AK

Dear Ms. Mollander,

I would like to express my dismay with the Forest Service's choice of Alternative 4 as their preferred alternative. I believe Alternative 2 - the proposed action, is a better choice. (I'm a bit confused with the terminology used in this document. Why is Alternative 2 called "proposed action" and what does this mean? What is the difference between a "proposed action" and a "preferred alternative"?) Anyway, I believe that Alternative 2 is a better choice for the following reasons:

ORV use should no longer be allowed on the Mendenhall Glacier Recreation Area. On page 8 of the 1995 MGRA Management Plan (in blue), the third directive is to manage for public safety needs first, environmental protection needs second and compatibility of uses third, while providing recreation opportunities. ORV use is directly contradictory to this directive. It is in direct conflict with public safety to have a 400 lb., speeding, motorized, vehicle using the same path as 5 year old children on cross-country skis. ORVs do major damage to the environment and the noise they create is not compatible with hiking, birdwatching or any other recreational activity that takes place in the area. As you well know, visitors come to the area for the peace, solitude, and magnificent views. Noise from ORVs very definitely detracts from those attributes.

The majority of people who use the MGRA are not ORV riders. I understand that the Forest Service manages for multiple use, but multiple use does not mean that the Forest Service has to provide space for all user groups in all places.

ORV users have other, more appropriate, areas to ride; already disturbed, industrial areas of which there are a couple in Juneau, for example. Snowmobiles are already allowed on other Forest Service trails in the Juneau area, so they too, have other places to ride.

One other concern has to do with enforcement. Does the Forest Service have resources to adequately police the area? The Eagle Beach shelter and Skater's cabin have been burned and vandalized, and not adequately taken care of because of lack of enforcement personnel. Illegal ORV use at Eagle beach constantly occurs. How will you stop ORV's from riding where they please at the MGRA?

Finally, if this use is still allowed, and I strongly object to it, the Forest Service should install a clause that says if ORV users violate the conditions of this plan, their use of the

43.1

Please refer to response 3.2

43.2

Please refer to response 1.1 and 3.3. The Record of Decision prohibits ORV use except on the west side of Mendenhall Lake when it is frozen, this should alleviate most of your concerns regarding ORV noise, resource damage, safety and solitude.

43.3

Please refer to response 1.1 and 3.3.

43.4

Please refer to response 1.1 and 29.5.

43.5

Please refer to response 39.6

43.1

43.2

43.3

43.4

43.5

43.6

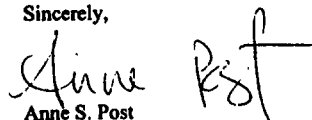
43.6

area will be terminated. Allow them there on a trail basis. Perhaps require that they attend a safety training session before they can use the MGRA.

My family and I have used this wonderful area for many years and we are happy that the Forest Service is considering implementing some changes to the area. I feel that these changes will improve the area for tourists and locals alike. However, because of the dangerous and unpleasant experiences we have had with ORVs in this area we will be forced to go elsewhere for outdoor recreation if you do not close the area to ORVs. It is no longer a use that is compatible with the majority of recreationists and adjacent homeowners.

Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in cursive script, appearing to read "Anne Post".

Anne S. Post  
9355 Rivercourt Way  
Juneau, AK 99801

43.6

The clause which you suggest will not be necessary as the Record of Decision prohibits most ORV use in the Mendenhall Glacier Recreation Area. See responses 1.1, 3.3, the Recreation Plan, Chapter 2, Alternative 6, and the Record of Decision.



# United States Department of the Interior

OFFICE OF THE SECRETARY  
Office of Environmental Policy and Compliance  
1689 C Street, Room 118  
Anchorage, Alaska 99501-8128

ER 95/751

NOV 27 1995

Ms. Karen Mollander  
District Ranger  
Juneau Ranger District  
U.S. Forest Service  
8465 Old Dairy Road  
Juneau, Alaska 99801

Dear Ms. Mollander:

In response to your request, we have reviewed the October 1995 Draft Environmental Impact Statement (EIS) for the revision to the Tongass National Forest Mendenhall Glacier Recreation Area Management Plan (Plan). We offer the following comments for your consideration.

The Draft EIS responds to many of the issues identified in a January 23, 1995 letter to your office from the Fish and Wildlife Service commenting on the draft Plan; however, we believe that the following issues remain to be addressed in the Final EIS.

44.1

Several species of shorebirds and waterfowl feed and nest along Mendenhall Lake, other nearby small lakes and adjacent marshes. We believe that the Final EIS should include methods to protect shorebird, tern, and gull nesting habitat; such as timing of permitted uses or limiting recreational use overall. We suggest protecting the north and south ends of Mendenhall Lake, as illustrated in Alternative #3, in the Draft EIS. Since dogs have been known to harass and kill ground nesting birds, such as shorebirds and their downy young (Judith Falk, personal communications), we suggest that pedestrian traffic and dogs be excluded in nesting areas from late May through August, or that hikers be required to have their dogs on a leash during this period.

44.2

The preferred alternative includes off-road vehicle (ORV) use in designated areas. ORVs can adversely affect wildlife habitat directly and indirectly. We believe the Final EIS should state how ORV use will be monitored and regulations enforced or how such uses will be restricted or curtailed.

44.3

We believe the Final EIS should include specific standards and guidelines for the Recreation Area to protect fish habitat. Such standards and guidelines, we believe, will eliminate or mitigate adverse impacts to fish spawning habitat, as well as reduce or eliminate harmful and illegal activities.

44.1

Please refer to the Record of Decision for the Forest Service decision and rationale on Fish and Wildlife protection in the Recreation Area.

44.2

Please refer to the Record of Decision for the Forest Service decision to prohibit ORV use in the Recreation Area. Enforcement of ORV closures will be implemented by the Juneau District Law Enforcement Officers, as funding allows. Also see Chapter 2, section F. Mitigation and Monitoring.

44.3

Specific Best Management Practices identified in FSH 2509.22 (Soil And Water Conservation Handbook) provide habitat protection objectives and implementation measures for management activities that could have negative impacts to aquatic resources. It is Region policy to implement these Best Management Practice in all Forest Service projects.

44.4

We remain concerned over winter (November and December) bald eagle salmon feeding areas along the Mendenhall River and feeder streams. Since these birds are easily disturbed by human encroachment, we suggest the Final EIS include management practices which may limit recreational activities during this time period.

44.5

We also suggest the Final EIS include an Index.

We appreciate the opportunity to review and comment on this document. If you need any clarification of these comments, please contact Carol Hale of the Fish and Wildlife Service, Juneau (907-586-7240).

Sincerely,



Regional Environmental Officer - Alaska

44.4

The main winter eagle gathering places are along the river, the outlet of Dredge Lake down stream to the Holding Pond, Moose Lake, the mouth of AJ and Steep Creek. Steep Creek has the largest concentrations with up to 6 eagles at any one time. The number of birds and the timing of large concentrations vary from year to year depending on ice conditions and fish availability. Generally the large concentrations persist for less than a day at a time, and may occur several times throughout the winter. Because the Visitor Center, and the Glacier Spur Road, are so close to Steep Creek, the greatest potential for impacts to the feeding eagles occur there. The amount of winter human use at the Visitor Center also varies depending on the weather. Generally, sunny days generate more use than cloudy days, particularly on weekends and when it has been cold enough to ensure safe travel onto the area. On a sunny December weekend day, several hundred people may be using the area around the Visitor Center at one time. Because concentrations of people in the area is sporadic due to weather, usually cold clear days, and eagle concentrations are also sporadic due to weather, often short warm spells after extended cold weather, the two do not normally overlap. For these reasons we feel area closures are not appropriate at this time. We are available to work with you on this issue if you have additional information and are interested in participating with us on a monitoring or education program.

44.5

This change has been made, thank you for your comment.

## Gray Line of Alaska

Tuesday, November 28, 1995

VIA FAX (907) 586-8808

Ms. Karen Mollander  
District Ranger  
Juneau Ranger District  
8465 Old Dairy Road  
Juneau, AK 99801

Dear Ranger Mollander,

I would like to thank you for taking the time to meet with me on Monday. It is important to assure that you understand our position. Even though I continue to be frustrated by the bureaucratic process, I better understand your restrictions.

To reiterate our concerns with the draft alternatives and/or to request information presented at our meeting:

- 45.1 ♦ I would like you to review the cap limitations based on the Tongass plan when it is finalized. It concerns me that your office does not know a precise number of non-commercial users visiting the recreation area. I understand that the 50% commercial user number is a recommendation formulated in the "TLMP" plan, however, without any real number to go on, they may inadvertently restrict the number of visitors below the capacity limits. I understand, through our conversations, that limiting this number is not your philosophical position. I
- 45.2 further understand the capacity is based on 8 hour tour days and non-commercial use may not be pertinent in setting the commercial limits.
- 45.3 ♦ Per our discussion, clearly Holland America Line will require a 96,000 passenger authorization for 1996. As Joni expressed, the number of passengers considered for the permit is based, in part, on the estimates of the company. With the new cruise ship accounts we have acquired our needs have risen dramatically.
- 45.4 ♦ We would recommend a "blending" of alternatives if at all possible to take the best of all plans. It appears that each alternative has it's own design, perhaps giving and taking from each can achieve greater harmony between the USFS, commercial and non-commercial use.
- 45.5 ♦ As I expressed in our meeting, Gray Line will develop bike tours outside the Visitor complex in order to relieve some of the congestion. In order for us to consider this prospect, we need authorization to use bicycles to the Mendenhall River off Montana Creek road. I understand that this may constitute, yet another, special use within the

300 Elliott Ave. W. Seattle, WA. 98119 (206) 281-0578 Fax (206) 281-0621

45.1

The preferred alternative has been changed and allows commercial use at the Visitor Center up to 65% of capacity. Please refer to the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision. Please also refer to the Record of Decision, Description of Monitoring Measures for the preferred alternative. Analysis of the Capacity Limits and effects are included in Chapter 4, Issue 3 - Commercial Use. This latter section has been re-written for clarity.

45.2

Please refer to response 45.1.

45.3

This special use authorization is outside the scope of this decision. We have noted your use request for the 1996 season and will address this when we begin processing applications.

45.4

Please refer to the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision for a description of our preferred alternative and our reasons for selecting that alternative.

45.5

Your request was considered. Bike tours will be allowed in the Visitor Center Unit and along Glacier Spur Road only. Please refer to the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision for a description of our preferred alternative and our reasons for selecting that alternative.

Karen Mollander  
November 28, 1995  
Page 2

Continued

45.6 USFS guidelines. Please include this in your draft plan, or advise and I can develop a description for you if necessary.

45.7 • I would like more information about funding the NEPA study. It appears there is an opportunity for companies to speed the process up by funding the program. Holland America Line may consider this option if available. Please forward any information I need to review our alternatives.

45.8 • We are very interested and supportive of enforcement activities. With the estimates of illegal operators visiting the site, I am pleased that you have recognized this problem and are taking action to prevent it. Clearly any reduction in this activity may provide for an increase in authorized visits.

45.9 • I would appreciate a listing of companies with a "priority" rating and the number of visits they are allowed. It is my understanding that the bid offerings will be based on these numbers. I would also appreciate a review of Holland America's priority number.

45.10 • Please forward the prospectus and bid procedures which you will be using.

I appreciate the time you took to meet with us and that a mutual understanding of our interests and obligations was formulated. I look forward to getting the information I have outlined so that I can take advantage of any opportunity to operate Bicycle tours at the earliest. Any indication from you of a possible permit would be appreciated.

If I can be of help to you, please contact me.

Sincerely,

*Chuck*

Chuck Acker  
Director Safety, Training &  
SE Alaska / Yukon Operations

CC: Gordon Barr, Vice President Transportation Division  
Ken Bechtel, Juneau Division Manager  
Bob Blasco, Esq. Robertson, Monagle & Eastaugh

300 Elliott Ave. W. Seattle, WA. 98119 (206) 281-0578 Fax (206) 281-0621

45.6

Please refer to response 45.5.

45.7

Funding additional environmental analysis for new commercial uses is outside the scope of this decision. We will forward additional information to you through this process.

45.8

Please refer to response 18.3. Additionally, the Forest Service will be providing a full time person, beginning this season, to control traffic and check for special use permit compliance.

45.9

Providing a list of companies with "priority use" is outside the scope of this decision and is an administrative procedure. We still need to review our special use permit records to determine which companies have or qualify for "priority use." We will be glad to send this information to you after we have reviewed our special use permit files and will also let you know Holland America's status.

45.10

Our prospectus and bid process is an administrative procedure that is outside the scope of this decision. We will be glad to send you additional information on this.

45.11

Please refer to the Record of Decision, Description of the Forest Service preferred alternative and Rationale for the Decision. Bicycle tours will be an approved type of tour. Administrative Prospectus and Bid procedures will be required as there are several operators who have expressed interest in this type of opportunity.



# **Appendix B**

## **List of Agencies, Organizations and Individuals Receiving Copies of the Final EIS**

### **Individuals**

Aitken, Alan  
Arthur, Susan  
Baker, Bruce  
Blair, Kim  
Blick, James & Sharon  
Bowen, Gary & Mary  
Brenner, Terry  
Buzzell, Larry  
Carney, Judith  
Conners-Allen, Patricia  
Dietrick, Larry  
Dippold, Ronald & Elisabeth  
Donek, Chris & Tom  
Dunn, William Philip  
Fisher, Terry  
Fuller, Anne  
Garrison, Bruce  
Glude, Bill  
Gordon, Richard  
Greening, Barbara Tomlinson  
Harris, Richard  
Henderson, Bart

Hood, Dixie  
Howell, Donald  
Humphrey, Lynn  
Jones, Doug  
Kimball, Arther & Effie  
Koenings, Linda  
Kokotovich, Kate  
Lee, Stephan  
MacPhail, Deanna  
McCaughan, Mark  
Northam, Marilyn  
Post, Ken & Ann  
Rausch, Robert  
Schrader, Sue  
Seslar, Dion  
Spargo, Dave  
Tyler, Susan  
Tynan, Patricia  
Waarvik, Dave  
Weidner, Walt  
Windred, Theresa  
Young, Jan

## **Agencies and Organizations**

**Adventure Sports**

**Alaska Dept. of Conservation (Dick Stokes)**

**Alaska Dept. of Education**

**Alaska Dept. of Fish and Game (Lana Shea, Regional Supervisor)**

**Alaska Dept. of Governmental Coordination (Project Review Coordinator)**

**Alaska Dept. of Natural Resources (Andy Pektivich)**

**Alaska Dept. of Transportation (Tracy Moore, Engineering Manager)**

**Alaska Division of Telecommunications**

**Alaska Division of Tourism (Tom Garrett, Wendy Wolfe)**

**Alaska Discovery (Ken Leghorn)**

**Alaska Electric Light and Power**

**Alaska Native Tours (Alberta Aspen)**

**Alaska Rainforest Treks (Karia Hart)**

**Alaska Sightseeing Tours (Dwight Hutchinson, Operations Manager; Larry Johansen)**

**Alaska State House**

**Alaska State Museum (Jerry Howard)**

**Alaska State Parks (Bill Garry, Jack Sinclair)**

**Alaska State Senate**

**Alaska Travel Adventures (Bob Dindinger, Jeff Keys)**

**Alaska Up Close (Judy Schuler)**

**Alaskans for Juneau**

**Arctic Associates International (Alan Walker)**

**B Independent Taxi Services**

**Backroad Tours (Allen Lindberg)**

**Beartrack Charters**

**Biodiversity Legal Foundation**

**Borough of Haines (Mayor)**

**Capital Cab**

**Capital City Fire and Rescue (Dick Rice, Rescue Coordination; Charles Lundfelt, Fire Chief)**

**Capital City Weekly**

**Chilkat Valley News**

**City and Borough of Juneau (Dennis Eagen, Mayor; Cheryl Easterwood, Community Development; Richard Gummow, Chief of Police; Cristi Herren, Planner; Bob Millard, Engineering; David Miller, Juneau International Airport; Ernie Mueller, Public Works; Barbara Sheinberg, Planning Commission; Terese Smith, Parks and Recreation; Marie Darlin, Tourism Working Group)**

**City of Haines (Mayor; David Nanney, Planning Commission)**

**City of Skagway (Mayor)**

**Coastal Helicopters (Jim Wilson)**

**Colorado State University (Documents Department)**

**Cooke Cable Vision, Inc. (PSA Director)**

**Cruiseline Agencies of Alaska (Don Habeger, Manager)**

**Cycle Alaska (Joyce Waldman)**

**DIPAC (Ladd MaCaulay)**

**Discovery Foundation (Cindy Stanek)**

**Ducks Unlimited (Art Dunn, Juneau Chapter)**

**Eagle Express Line (Mary Ann Waldron)**

**Eagle Sports**

**Echo Bay**

**Era Helicopters**

**Federal Aviation Administration**

**Federal Aviation Administration Control Tower  
(Steve Turner)**

**Foggy Mountain Shop**

**Foundation for Glacier and Environmental Re-  
search (Dr. Maynard Miller)**

**Friends of Berners Bay (Skip Gray)**

**Gastineau Aeromodelers Society (Ben Davis,  
Rich Bailey)**

**Gastineau Guiding (Bob Janes)**

**Glacier Bay Tours**

**Grayline of Alaska (Chuck Acker, Ken Bechtel)**

**Greater Juneau Chamber of Commerce**

**Hansen Engineering (Ronald Hansen)**

**Honda Hut**

**Hurricane Vending (Mike Roy, John Armstrong)**

**Icy Strait Environmental Services (Gregory  
Streveler)**

**Island Waterways (Don and Elia Adams)**

**Juneau Area State Parks Citizen Advisory  
Board**

**Juneau Audubon Society**

**Juneau Convention and Visitors Bureau (Kari  
Westlund)**

**Juneau Custom Tours**

**Juneau Economic Development Council  
(Charles Northrip)**

**Juneau Empire (News Director)**

**Juneau Free Wheelers (John Wray, President)**

**Juneau Highlight Tours**

**Juneau Limousine Service**

**Juenau School District**

**KINY Radio (Chris Burns)**

**KJNO/KTKU**

**KJUD Television/KSUP Radio**

**KTOO Television and Radio**

**League of Women Voters**

**Luxury Limousine (Al Nix)**

**Lynn Canal Conservation, Inc.**

**McDowell Group**

**Mendenhall Glacier Transport (Frank and Don-  
na Rich)**

**Millar Enterprises (Mike Millar)**

**Mountain Gears**

**National Marine Fisheries Service (Duane Peter-  
son)**

**National Park Service (Clay Alderson, Klondike  
Gold Rush National Historic Park; Marv Jensen,  
Glacier Bay)**

**Nature's Edge Property Owners Association  
(Chris Gianotti)**

**Outdoor Headquarters**

**Prawl Communications (Gustin Enterprises)**

**Princess Tours (Kirby Day, Division Manager;  
Richard Butler, Director Southeast Operations)**

Ptarmigan Ptransport Ptours (Donna Perkins)  
Raincountry Flyfishers (A.J. Soltys)  
Rayco Sales  
Riverwood Studio (Kitty Bauer)  
Royal Highway Tours (Richard Butler)  
Sierra Club (Michael Sakarias, Juneau Chapter)  
Sierra Club Leagal Defense Club  
Skagway Convention and Visitors Bureau (Bob Ward)  
Socio-Technical Research Applications (Charlene Toomer)  
Southeast Alaska Conservation Council (Chris Frank)  
Southeast Alaska Tourism Council (Kristin Freng)  
Southeast Marine  
Southeast Regional Resource Center (Allen Barnes)

Taku Conservation Society (Mary Lou King)  
Taku Taxi  
Temasco Helicopters (Bob Engelbrecht)  
Territorial Sportsmen  
Thane Neighborhood Association (Paula Terrel)  
The Paper (News Director)  
Trail Mix (Betty Sequin)  
Trout Unlimited (Steve Kessler, Juneau Chapter)  
U.S. Bureau of Mines (David Carnes)  
U.S. Fish and Wildlife Service (Nevin Holmberg, Ecological Services; Helen Clough, Refuge Planning)  
U.S. Forest Service (Chatham Area Forest Supervisor Staff; Alaska Region Regional Office Staff; Juneau Ranger District Staff; Juneau Forest Sciences Laboratory Staff; Jeannine Lilly, Petersburg Ranger District; Chugach National Forest Staff; Glacier Ranger District Staff; Mt. St. Helens National Monument Staff; Randle Ranger District Staff)  
University of Alaska, Southeast Library  
Westen Auto Store  
Wright Tours (Steve Wright)

# **Appendix C**

## **Existing Management Direction**

### **Existing Management Direction**

Set apart and withdrawn as a special area in the late 1940's and early 1950's, the Recreation Area's overall management direction primarily comes from the Tongass Land Management Plan (TLMP, 1985, as amended), the 1975 Mendenhall Glacier Recreation Area Management Plan, Recreation Opportunity Spectrum (ROS) class designations, and federal regulations (36 CFR 294.1(a)) establishing that special areas be managed principally for recreation use substantially in the area's natural condition. Additional management direction for the Recreation Area is also established in a number of agency directives, management plans and other federal laws and regulations. Taken together, all provide the framework for management of the Mendenhall Glacier Recreation Area.

### **Authorization**

The area was set apart on May 14, 1947, when Regional Forester Frank B. Heintzlemann classified the Recreation Area as a special area:

"This area...is classified as the Mendenhall Lake Recreation Area and is hereby set apart and reserved for Public Recreation Use and closed to all occupancy and use inconsistent with Recreation Use." (USDA Forest Service, 1965)

In 1952, Public Land Order 829 formally withdrew the 5,815 acres of land, creating the area now known as the Mendenhall Glacier Recreation Area. Clarification of the Recreation Area's purpose and values was further stated in 1962, when the Mendenhall Glacier Visitor Center, the first Forest Service visitor center in the nation, was completed.

The Chief of the Forest Service, Ed Cliff, dedicated the Visitor Center to the furtherance of "understanding and enjoyment of glacial phenomena," focusing public use and management for the Mendenhall Glacier Recreation Area, and beginning the Visitor Information Service function of the agency nationwide. (USDA Forest Service, 1975) Further clarification of the management direction for the Recreation Area has been provided under authority of 36 CFR 294.1(a) which establishes that special areas be managed principally for recreation use substantially in the area's natural condition.

### **Tongass Land Management Plan**

The *Tongass Land Management Plan* (TLMP, 1985, as amended) identifies the Recreation Area as Management Area C06 - Juneau, and classifies it as Land Use Designation (LUD) III - Special Area. Under LUD III, emphasis is placed on managing the land for uses and activities in a compatible and complementary manner to provide the greatest combination of benefits. These areas have either a high use or a high commodity value. These lands may include concentrated recreation development.

A LUD III - Special Area is managed with a LUD III emphasis, but is excluded from calculation of timber yield.

The *Tongass Land Management Plan* calls for this area to be managed as outlined in the approved Mendenhall Glacier Recreation Area Plan.

## **Alaska Regional Guide**

The *Alaska Regional Guide* (USDA Forest Service, 1983) is a document which provides direction to the Tongass National Forest and the Chugach National Forest for land and resource planning and management. According to the *Alaska Regional Guide*, the Forest Service will provide a broad spectrum of recreation opportunities in accordance with identified needs and demands. The intent of this policy is to encourage development of all types of services within the private sector to meet a variety of public demands. In some cases, various services may not be mutually compatible.

## **1975 Mendenhall Glacier Recreation Area Management Plan**

The 1975 Mendenhall Glacier Recreation Area Management Plan was approved after lengthy public involvement efforts and provides the specific management direction for the area as a whole and for each unit within the Recreation Area. Overall management objectives are to manage for a near natural environment with an emphasis on the glacial and aesthetic values; to provide for a balance of experiences to accommodate tourism and local public use; to maintain a low to moderate level of service, convenience and facilities except at the Visitor Center which is intensively used; to continue to place primary emphasis on the key glacial and aesthetic attractions; and to prepare a Visitor Information Service Plan which would detail interpretive programs at the Visitor Center. Specific management decisions and actions planned per unit are further described in the 1975 Management Plan. Copies of this document are available for review at the Juneau Ranger District and local public libraries in Juneau.

## **Off-Road Vehicle Management Plans**

There are three off-road vehicle (ORV) management plans that guide existing management direction regarding ORV use on the Juneau Ranger District.

### **The Juneau Ranger District Off-Road Vehicle Travel Plan (1985).**

This travel plan simply states, "The area encompassed by the Mendenhall River to the west, the Moraine Ecology area as posted to the north, the Mendenhall Loop Road to the east, and the private residences on the Mendenhall Loop Road to the south are the boundaries open to *casual* snowmachine and motorcycle riding (no competitive or organized events)."

### **Chatham Area, Tongass National Forest, Off-Road Vehicle Environmental Assessment Report (EAR) (1977, as updated)**

This EAR was prepared prior to the *Tongass Land Management Plan*, and was incorporated into TLMP by reference. It is comprised of a general plan with specific maps and instructions for each districts' closed areas.

### **Chatham Area Vicinity Off-Road Vehicle Management Environmental Assessment (EA) (1975)**

This EA states "Dredge-Crystal Lakes area will remain open to snowmobiles. However, Dredge Lake entry road will be closed to protect adjacent residents. Entry is to be by trailering (ORV) vehicles in or by the entry road off the Loop road at the Mendenhall River crossing."

## **Recreation Opportunity Spectrum (ROS)**

The Recreation Opportunity Spectrum (ROS) is a management system which sets direction for purposefully managing environmental settings and the activities which occur within them. ROS also provides a guideline by which the land manager can provide the opportunities for publicly desired recreation experiences. Based on the goal of providing satisfying recreation experiences for visitors, ROS is an arrangement of probable experience opportunities along a continuum or spectrum.

Each ROS class describes a number of criteria, including the number of encounters between different user groups. Although the current TLMP does not assign ROS classes to the individual Land Use Designations (LUD), the proposed Revised TLMP does set ROS standards for the proposed LUD's. Under the expectation that ROS classes will be incorporated, the ROS designations for each unit within the Recreation Area as listed in the 1996 Mendenhall Glacier Recreation Area Management Plan are adopted for this FEIS.

## **Forest Service Manuals and Handbooks**

The following Forest Service manuals and handbooks provide additional direction for management of the Recreation Area.

### **Special Areas Management**

Certain limited areas of National Forest System lands which are not designated as wilderness and which contain outstanding examples of plant and animal communities, geological features, scenic grandeur, or other special attributes merit special management. These special areas may be designated by law or may be designated administratively as special areas. Areas so designated are managed to emphasize recreational and other specific related values. Other uses are permitted in the areas to the extent that these uses are in harmony with the purpose for which the area was designated (FSM 2370).

#### **FSM 2371 - Special Areas Management (6/1/90)**

Objectives for special areas management include: 1) provide a showcase for National Forest management standards; 2) provide for public enjoyment of the area for outdoor recreation or other benefits; 3) protect the special values and attributes of the area (that is, scenic, cultural, historic, wilderness, wildlife, or other values) that contribute to public enjoyment; 4) manage for any other resource values present in the area, in a manner that does not impair the public recreation values or the special attributes of the area.

#### **FSM 2371.4 - Special Areas Occupancy and Use (6/1/90)**

In special areas, the Forest Service is to provide for public use and enjoyment of each special area up to the level that will ensure protection of the special values for which the area was established. Allow occupancy and public use of each area to the extent that neither interferes with the primary values of the area as described in the Act, its legislative history or National Forest management standards.

#### **FSM 2372.4 - Special Areas Development, Occupancy and Public Use (6/1/90)**

Policy includes: 6) encourage public use and enjoyment of each administratively designated special area up to the level that will ensure protection of the special values for which the area was established; 8) allow occupancy and use of the area's resources to the extent they neither interfere with the primary values for which the area was established nor negatively affect the visitors' experience.

**FSM 2718.13 - Special Areas: Recreation Areas (11/6/92)**

Policy states that Forest Officers may grant special use authorizations in areas classified for recreational purposes, provided the uses are compatible with the purpose for which the areas are classified (36 CFR 294.1).

**Recreation Management**

In addition to special areas management policy, Forest Service manuals and handbooks provide direction for recreation management, recreation sites and facilities, and occupancy and use. These include:

**FSM 2300 - Recreation, Wilderness, and Related Resource Management (10/11/94)**

Objectives for public recreation management include: 1) to maximize opportunities for visitors to know and experience nature while engaging in outdoor recreation; 2) to develop and manage sites consistent with the available natural resources to provide a safe, healthful, esthetic, nonurban atmosphere; and 3) to provide a maximum contrast with urbanization at National Forest sites.

Policy includes: 1) use recreation opportunity spectrum guidelines (FSM 2310) when developing sites; 2) develop sites and facilities that will provide recreation experiences toward the primitive end of the spectrum. Do not provide urban class facilities; 4) develop sites and facilities to enhance natural resource-based activities normally associated with a natural environment.

**FSM 2311.1 - Recreation Opportunity Spectrum (ROS) (6/1/90)**

Policy includes using ROS system to delineate, define and integrate outdoor recreation opportunities in land and resource management planning (FSM 1922.15, item 2).

**FSM 2330 - Publicly Managed Recreation Opportunities (10/11/94)**

Objectives for public recreation management include: 1) Maximize opportunities for visitors to know and experience nature while engaging in outdoor recreation; 2) Develop and manage sites consistent with the available natural resources to provide a safe, healthful, esthetic, nonurban atmosphere; 3) To provide a maximum contrast with urbanization at National Forest sites.

**FSM 2331.03 - Publicly Managed Recreation Opportunities (10/11/94)**

Administration policy includes: 3) limit regulation, constraint, and supervision of recreation use to the minimum necessary for resource protection, visitor satisfaction, and safety.

**FSM 2333.32 - Site Capacity (10/11/94)**

Ensure that the capacity of the site matches the desired recreation opportunity spectrum (ROS) class and the ability of the site to withstand use.

**FSM 2334.32 - Site Management (10/11/94)**

Do not allow overcrowding...when a site is occupied to capacity, direct visitors to other sites or to overflow areas. Provided overcrowding does not occur, concentrate use in a few sites as opposed to the same amount of use scattered throughout all sites.

**FSM 2340.3 - Privately Provided Recreation Opportunities (6/17/94)**

Policy includes: 3) deny applications by the private sector to construct or provide outdoor recreation facilities and services on National Forest System lands if these facilities and services are reasonably available or could be provided elsewhere in the general vicinity.



**FSM 2350 - Trail, River, Off-Road Vehicle Management (7/8/94)**

Objectives for trail related management are: 1) provide trail-related recreation opportunities that serve public needs and meet land management and recreation policy objectives; 2) provide trail recreation opportunities that emphasize the natural setting of the National Forest and are consistent with land capability; 3) provide trail access for National Forest Management and protection.

Objectives for Off-Road Vehicle Management are: 1) provide a diversity of off-road vehicle recreational opportunities when: (a) the use is compatible with established land and resource management objectives; (b) The use is consistent with the capability and suitability of the resources; (c) the type of off-road vehicle opportunity is an appropriate National Forest Recreation activity and (d) there is demonstrated demand; 3) designate all National Forest System lands for off-road vehicle use in one of three categories: open, restricted, or closed; 4) use signing to identify either the areas that are open to off-road use, or that areas that are closed to off-road vehicle use. Select the method that better informs the public and that is easier to administer; 6) close areas or trails to the type of off-road vehicle causing, or likely to cause, considerable adverse effects.

Objectives for river related management are: provide river and similar water recreation opportunities to meet the public needs in ways that are appropriate to the National Forest recreation role and are within the capabilities of the resource base.

Policies for river related management include: 1) plan and manage river recreation in a context that considers the resource attributes, use patterns, and management practices of nearby rivers...; 2) emphasize activities that harmonize with the natural settings of the National Forest. Normally, limit river recreation opportunities to the primitive to rural portion of the recreation opportunity spectrum (ROS, FSM 2310); 4)...When necessary, prescribe direct management techniques (FSM 2354.41a) that are sensitive to the values that users seek. Impose only that level of direct management necessary to achieve management objectives; 7) establish use limits and other management procedures that best aid in achieving the prescribed objectives for a river and is providing sustained benefits to the public.

**FSM 2720 - Special Uses Administration (6/17/94)**

The objective of special use administration is to issue and administer special use permits for recreation uses that serve the public, promote public health and safety, and protect the environment.

**FSH 2309.18 - Trails Management Handbook (11/8/91)**

The planning section of this handbook addresses items such as social, physical, and managerial setting for trail management, and provides guidance for trail planning analysis.

**FSH 2309.23 - Publicly Managed Recreation Handbook (1/88)**

This handbook provides operational guidelines for campgrounds and day use areas.

**FSH 2709.11 - Special Uses Handbook (8/31/93)**

This handbook provides direction for management of outfitting and guiding services on National Forest lands and waters.

## **Code of Federal Regulations/Forest Orders (Subpart A & B)**

Under the provisions of Title 36 of the Code of Federal Regulations (CFR), adopted pursuant to Title 16 of the United States Code, the following are some of the designations, closures, permit requirements and other restrictions that are imposed under the discretionary authority of the Forest Service.

**36 CFR 261.9 Property** - prohibits damaging of a natural feature.

**36 CFR 261.10 Occupancy and Use** - states that users must not: a) construct a road or trails; f) place a vehicle so it is a hazard to the safety or convenience of any person; h) operate an engine near a campsite which unreasonably disturbs any person; i) fail to stop when directed by a Forest Officer.

**36 CFR 261.10(d) Occupancy and Use** - prohibits discharging of any firearm or any other implement capable of taking human life, causing injury, or damaging property: 1) in or within 150 yards of a residence, building, campsite, developed recreation site or occupied area, or 2) across or on a Forest Development road or a body of water adjacent thereto, or in any manner or place whereby any person or property is exposed to injury or damage as a result of such discharge.

**36 CFR 261.12 Forest Development Roads and Trails** - states it is unlawful to c) damage a trail or road; or d) to block or interfere with use of a road or trail.

**36 CFR 261.13 Off-Road Vehicle Use.** - Requires that operators must have a) a valid operators license as required by state law; b) operating brake system; c) working head/tail lights one half hour before daylight and after sunset; d) meet state emissions standards. In addition it states operators must not: e) be under influence of alcohol or drugs; f) create excessive smoke; h) operate in a manner which unreasonably disturbs land, wildlife, or vegetation; i) operate in violation of state law.

**Note:** Alaska does not require a license for ORV use.

**36 CFR 261.14 Developed Recreation Sites** - prohibits: k) bringing in or possessing an animal; bringing in or possessing a saddle, pack, or draft animal except as authorized by posted instructions; n) operating a bicycle on a trail unless designated for bicycle use.

**36 CFR 261.53 (b)** - prohibits occupancy within 100 yards of Tern Island from April 1 through September 30.

**36 CFR 261.54(c) Forest Development Roads** - It is prohibited to use a road for commercial hauling without a permit or written authorization.

**36 CFR 261.54(f) Forest Development Roads** - It is prohibited to operate a vehicle carelessly, recklessly, without regard for the rights of safety of other persons, or in a manner or at a speed that would endanger or be likely to endanger any person or property.

**36 CFR 261.50(a) and 261.58(a) Occupancy and Use** - 1) It is prohibited to camp within the boundaries of the Juneau Ranger District for a period longer than twenty-one (21) days per calendar year.

2) It is prohibited, within the boundaries of the Auke Village Campground and the Mendenhall Lake Campground, to camp for a period longer than fourteen (14) days per calendar year.

**36 CFR 261.53(e) Special Closure - 12:00 Midnight to 6:00 a.m.** - It is prohibited to go into or be upon any area described in this order from 12:00 midnight to 6:00 a.m., which is closed for the protection of public health or safety. 1) Mendenhall Glacier Visitor Center parking lot; 2) Skaters Cabin; 3) Auke Village Recreation Area; 4) Lena Beach Picnic Area; 5) Eagle Beach Picnic Area; 6) Dredge and Crystal Lake Unit of the Mendenhall Glacier Recreation Area.

**36 CFR 261.50(a) and (b) Prohibited Acts in the Dredge Lake Area** - 1) It is prohibited to possess or use a vehicle off forest development roads according to 36 CFR 261.56. The Mendenhall Lake area is closed to ORV's except for casual use of motorcycles is permitted in the Dredge Lake area.

2) It is prohibited to go into or be upon any area described in this order from 12:00 Midnight to 6:00 a.m., which is closed for the protection of public health or safety.

**36 CFR 261.50(a) and (b) Forest Development Roads and Trails** - Forest Order JRD-95-007 requires a permit for the following commercial traffic on these roads and trails within the Recreation Area, Visitor Center parking lots and turnaround, Mendenhall Lake Road, Mendenhall Lake Campground, East Glacier Trail, Moraine Ecology Trail, Mendenhall Glacier Nature Trail (Trail of Time), McGinnis Trail, Nugget Creek Trail, Photo Point Trail, Powerhouse Trail, and West Glacier Trail:

Shuttle bus or shuttle vehicle service; motorized vehicle tours or package tours; hiking tours; bicycle tours; horseback riding tours; photography tours; general sightseeing tours; other tours.

# **Appendix D**

## **Public Involvement**

### **Summary of Public Involvement**

Public involvement for the Mendenhall Glacier Recreation Area Plan revision was first initiated in May 1993. On May 3, letters were sent to approximately 250 people to solicit public comment on the preliminary issues to be addressed in the revision of the 1975 Management Plan. The *Juneau Empire* carried an article on May 9 entitled, "Glacier use plan up for review," which discussed the intent to revise the existing plan. On May 21, a public meeting was held at the Mendenhall Glacier Visitor Center to discuss the issues to be addressed in the revision of the existing plan.

On May 28, 1993, the public was notified through news releases and letters sent to approximately 250 people, that public meetings would be held on June 9 and 10. Paid advertisements announcing the meetings were published in the *Juneau Empire* on June 7, 8, and 9, with additional notices listed in the "Around Town" section of the newspaper. On June 9, a meeting was held at the downtown Juneau Public Library to discuss issues for the plan revision. Twenty four people attended this meeting. The June 10 meeting was rescheduled for June 16 and held at the Mendenhall Glacier Visitor Center with thirty people in attendance. The rescheduled meeting was also announced with paid advertisements in the *Juneau Empire*, June 15 and 16, and in the "Around Town" section.

Several other attempts were made to inform the public that the 1975 Management Plan was being revised and to request their input. On April 1, 1993, "Uncle Fatz" of KJNO radio conducted a live interview with Juneau District Ranger Ken Mitchell regarding the process to revise the Management Plan. On May 5, 1993, an article was published in "Splash", the newsletter of the local chapter of Trout Unlimited. On May 19, a presentation was made at the Trout Unlimited general membership meeting. On May 20, a presentation was made at the Mendenhall River Community School Parent Teacher Organization meeting. On June 15, Forest Service personnel attended a meeting of the City and Borough of Juneau Parks and Recreation Department and informed the group of the proposed revision to the plan.

In addition to the comments received at the public meetings, 79 written and telephone comments from individuals, organizations, and agencies, and a petition with 22 signatures from an adjacent homeowners group were received by the Juneau Ranger District during this period in 1993.

All of the above public participation was used to formulate the proposed action and revise the 1975 Management Plan. In November 1994, a Notice of Intent was published in the Federal Register and the Proposed 1995 Management Plan was released for public comment and review, with a public scoping period of November 11, 1994 to January 21, 1995. It began with news releases and the publication of a full page newspaper insert in the *Juneau Empire* on November 11, reaching approximately 9,000 subscribers in the local community. The following week, a letter requesting public review and comment and a copy of the newspaper insert was also mailed to 320 people, organizations and

agencies. Two public "Open Houses" were sponsored December 5 and 6, to give the public an opportunity to meet with interdisciplinary team members and ask questions, discuss concerns, and leave comments if they wished. Approximately 100 people attended these Open Houses.

On January 14, 1995, at the suggestion of one of the public during scoping, the Forest Service sponsored two, one-half day facilitated working sessions where people concerned specifically about ORV use in the Recreation Area could meet. Letters were sent to the Recreation Area mailing list and interviews were conducted with local news media regarding the workshops. During the workshop, attendees were divided into small groups and developed suggestions and ideas in response to the conflicts between those who use ORV's and those who are opposed to use of ORV's. These meetings were attended by 45 people.

On January 19, 1995, "Uncle Fatz" of KJNO radio conducted an on-air interview and call in question and answer session with Interdisciplinary Team Members concerning revisions to the 1975 Management Plan and other planning efforts on the district.

At the end of this public scoping period, 138 comments and three petitions had been received by the Juneau Ranger District. All public comment is filed in the Environmental Impact Statement Planning Record and is available for review at the Juneau Ranger District office.

The Draft Environmental Impact Statement (DEIS) was mailed out for public review on October 2, 1995, with a 45 day scoping period that lasted until November 17, 1995. Over 514 copies of the DEIS were mailed to interested persons, organizations, and agencies. During this time, a front page article appeared in the *Juneau Empire* on October 8, 1995, and interviews were conducted with KTOO, KJNO, and KINY radio. Two display ads and two legal notices notifying the public of the availability of the DEIS were published in the *Juneau Empire* on October 6 and 8, 1995. Copies of the DEIS were also mailed to the local public, state, and university libraries, as well as being available at the Juneau Ranger District office. At the conclusion of the public comment period, 45 letters were received. Copies of these comments and agency responses to these comments can be found in FEIS Appendix A.

# Appendix E

## Recreation Opportunity Spectrum (ROS)

### ROS Class Urban

Setting Indicators	Standards and Guidelines
Visual Quality	Not to exceed the Modification Visual Quality Objective in the foreground and Maximum Modification in middle ground.
Access	Access and travel facilities are highly intense, motorized and often with mass transit supplements.
Remoteness	Remoteness is not important. High concentrations of people, and sights and sounds of human activity are acceptable.
Visitor Management	Intensive on-site controls are numerous and obvious. Information and interpretive facilities may be complex and dominant.
On-site Recreation Development	All Development Scales (I-V) are appropriate and maintained at intended standards necessary to accommodate the types and levels of use anticipated for the site and area. Synthetic materials are commonly used. Facility design may be highly complex and refined, but in harmony or complimentary to the site. Facilities typically include visitor centers, major campgrounds and other facilities for concentrated use.
Social Encounters	Interaction between large numbers of users is high. Sites often are at full capacity, but do not exceed 80% of the design capacity over the operating season.
Visitor Impacts	Visitor-caused impacts are noticeable, but not degrading to basic resource elements or exceed established visual quality objectives. Site hardening may be dominate, but is in harmony with natural/exotic landscape and appropriate for the site and setting.

## ROS Class Rural

Setting Indicators	Standards and Guidelines
Visual Quality	Not to exceed Modification in the foreground and Maximum Modification in middle ground.
Access	All forms of access and travel modes may occur, although access to and through the area is primarily by passenger vehicle. Road and trail surfaces are often hardened.
Remoteness	Remoteness is of little importance, and moderate to high concentrations of people and sights and sounds of human activity are acceptable when not continuous.
Visitor Management	On-site regimentation and controls are obvious. Control facilities such as parking areas, medians, and barriers harmonize with natural/exotic landscaping. Information and interpretive facilities may be complex and dominant on developed sites.
On-site Recreation Development	All Development Scales (I-V) are appropriate and maintained at intended standards necessary to accommodate the types and levels of use anticipated for the site and area. Facilities typically include visitor centers, major campgrounds and other facilities for concentrated use.
Social Encounters	User may meet more than 20 other parties per day on trails and in dispersed areas; no standard for encounters on roads and developed facilities. Developed sites often are at full capacity, but do not exceed 80% of the design capacity over the operating season.
Visitor Impacts	Visitor-caused impacts are noticeable, but not degrading to basic resource elements or exceed established visual quality objectives. Site hardening may be dominate, but is in harmony with natural/exotic landscape and appropriate for the site and setting.

## ROS Class Roaded Natural

Setting Indicators	Standards and Guidelines
Visual Quality	Not to exceed the Partial Retention Visual Quality Objective. Existing visual conditions ranging from Preservation through Retention are fully compatible and encouraged.
Access	All forms of access and travel modes may occur. Access to and through the area is typically by passenger vehicle, although motorized use may be restricted to provide for resource protection, user safety, or to provide a diversity of recreation opportunity.
Remoteness	Remoteness is of little importance, but low to moderate concentrations of human sights and sounds are preferred.
Visitor Management	On-site regimentation and controls are obvious. Control facilities such as parking areas, barriers and signs harmonize with the natural environment. Visitor information facilities are not elaborate or complex.
On-site Recreation Development	Facilities and structures generally do not exceed Development Scale III and are maintained to accommodate the types and levels of use anticipated for the site and area. Typical facilities include outdoor interpretive displays and rustic campgrounds and picnic areas.
Social Encounters	User meets less than 20 other parties per day on trails and dispersed areas, during at least 80% of the primary use season. Developed sites often are at full capacity but do not exceed 80% of the design capacity over the season of operation.
Visitor Impacts	Visitor-caused impacts are noticeable, but not degrading to basic resource elements or exceed established visual quality objectives. Site hardening may be dominate, but is in harmony with natural-appearing landscape and appropriate for the site and setting.



## ROS Class Roaded Modified

Setting Indicators	Standards and Guidelines
Visual Quality	Not to exceed the Maximum Modification Visual Quality Objective. Apply visual management techniques to soften effects of maximum modification conditions in the foreground of sensitive travel routes and recreation sites.
Access	All forms of access and travel modes may occur, although roads are generally not well suited to highway-type vehicles. ORV use on designated routes or areas is encouraged. Use by high clearance vehicles is common.
Remoteness	Remoteness from urban conditions and high concentrations of people is important. Low concentrations of human sights and sounds in a back-country roaded setting are preferred.
Visitor Management	On-site regimentation and controls are few. Control facilities are appropriate for the predominating back-country roaded setting. Visitor information facilities may be used to interpret management activities, but are not elaborate and are appropriate for the setting.
On-site Recreation Development	Facilities and structures generally do not exceed Development Scale II and are maintained to accommodate the types and levels of use anticipated for the site and area.
Social Encounters	User meets less than 10 other parties per day on trails and dispersed roaded areas during at least 80% of the primary use season. Few, if any, other parties are visible at dispersed campsites.
Visitor Impacts	Visitor-caused impacts are noticeable, but not degrading to basic resource elements. Site hardening may dominate at campsites and parking areas, but is in harmony with, and appropriate for, back-country roaded setting.

**ROS Class**  
**Semi-Primitive Motorized**

Setting Indicators	Standards and Guidelines
Visual Quality	Not to exceed the Partial Retention Visual Quality Objective. Existing visual conditions ranging from Preservation through Retention are fully compatible and encouraged.
Access	Travel on motorized and non-motorized trails and Traffic Service Level 4 roads, although some Traffic Service Level 3 roads provide access to and through the area. Use by high clearance vehicles and motorized water travel is common. Road density is less than one mile per square mile. Off-road snowmachine travel on snow may occur.
Remoteness	Nearby sights or sound of human activity are rare, but distant sights or sounds may occur. Setting is located more than 1/2 hour walk or paddle from Traffic Service Level 3 or other high use travel routes, not including marine travelways. Perception of remoteness is moderate.
Visitor Management	On-site regimentation and controls are few. Control facilities consist primarily of informational signs and site-specific road closures. Visitor information facilities may be used to interpret cultural and natural resource features, but are not elaborate and harmonize with the setting.
On-site Recreation Development	Facilities and structures generally do not exceed Development Scale II and are maintained to accommodate the types and levels of use anticipated for the site and area.
Social Encounters	User meets less than 10 parties per day on trails, roads, and shorelines during 80% of the primary use season. During 80% of the primary use season no other parties are visible from campsites.
Visitor Impacts	Visitor-caused impacts may be noticeable, but not degrading to basic resource elements. Site hardening is very infrequent, but, when it occurs, is in harmony with, and appropriate for, the natural-appearing back-country setting.

## ROS Class Semi-Primitive Non-Motorized

Setting Indicators	Standards and Guidelines
Visual Quality	Not to exceed the Retention Visual Quality Objective. An existing visual condition of Preservation is fully compatible and encouraged.
Access	Cross-country travel and travel on non-motorized trails is typical. Use of airplanes, helicopters, motorboats and snowmachines for traditional activities, subsistence, emergency search and rescue, and other authorized resource management activities may occur unless specifically restricted for safety and/or resource protection purposes.
Remoteness	Nearby sights or sound of human activity are rare, but distant sights or sounds may occur. Setting is located more than one-half hour walk or paddle from any road open to public travel, not including marine travelways.
Visitor Management	On-site regimentation and controls are rare. Visitor information facilities may be used to interpret cultural and natural resource features, but are not elaborate and harmonize with the setting.
On-site Recreation Development	Facilities and structures generally do not exceed Development Scale II and are maintained to accommodate the types and levels of use anticipated for the site. Forest Service Recreation cabins are fully compatible.
Social Encounters	User meets less than 10 parties per day on trails and waterways during 80% of the primary use season. No other parties are within sight or sound of dispersed campsites during 80% of the primary use season.
Visitor Impacts	Visitor-caused impacts to resources are rare and usually not long-lasting. Site hardening is limited to boardwalk trails, boat tramways, moorings and docks, bear-proof food cache facilities and rustic public recreation cabins.

## ROS Class Primitive

Setting Indicators	Standards and Guidelines
Visual Quality	Not to exceed the Retention Visual Quality Objective. An existing visual condition of Preservation is fully compatible and encouraged.
Access	Cross-country travel and travel on non-motorized trails and on waterways is typical. Use of airplanes, helicopters, motorboats and snowmachines for traditional activities, subsistence, emergency search and rescue, and other authorized resource management activities may occur unless specifically restricted for safety and/or resource protection purposes.
Remoteness	No or infrequent sights and sounds of human activity are present. Setting is located more than 1.5 hours walking or paddling distance from any human developments other than marine travelways.
Visitor Management	On-site regimentation and controls are very rare. Signing is limited to directional information and safety needs. No on-site interpretive facilities are used and there is great opportunity for discovery on the part of the user.
On-site Recreation Development	Structures do not exceed Development Scale I except for public recreation cabins, and are maintained for appropriate levels of use.
Social Encounters	User meets less than three parties per day during trip. No other parties are within sight or sound of dispersed campsites or cabins.
Visitor Impacts	Visitor-caused impacts to resources are slight and usually not noticeable the following year. Site hardening is limited to boardwalk trails and necessary boat moorings or bear-proof food caches and public recreation cabins.

# **Appendix F**

## **List of Acronyms**

AAC - Alaska Administrative Code  
ACMP - Alaska Coastal Management Program  
ADFG - Alaska Department of Fish & Game  
ANHA - Alaska Natural History Association  
ADA - Americans with Disabilities Act  
BMP - Best Management Practices  
CBJ - City & Borough of Juneau  
CCC - Civilian Conservation Corps  
CFR - Code of Federal Regulations  
COE - Corps of Engineers  
DEIS - Draft Environmental Impact Statement  
EA - Environmental Assessment  
EIS - Environmental Impact Statement  
FAA - Federal Aviation Administration  
FS - Forest Service  
FSM - Forest Service Manual  
JCVB - Juneau Convention and Visitors Bureau  
LUD - Land Use Designation  
MGRA - Mendenhall Glacier Recreation Area  
MGVC - Mendenhall Glacier Visitors Center  
NEPA - National Environmental Policy Act  
NFMA - National Forest Management Act  
NFS - National Forest System  
ORV - Off-Road Vehicle  
PAOT - People At One Time  
ROD - Record of Decision  
ROS - Recreation Opportunity Spectrum  
SUP - Special Use Permit  
TLMP - Tongass Land and Resource Management Plan  
USDA - United States Department of Agriculture

# **Appendix G**

## **List of References**

Alaska State Department of Community and Regional Affairs, 1996. Community Profile: Juneau.

Alaska Natural History Association and USDA Forest Service, 1991. Recreation Opportunity Guide: Juneau Trails, Tongass National Forest, Juneau Ranger District.

Alaska State Troopers. Personal communication, Trooper Chuck Lamica, April 1995. Law enforcement incidents reported, July 1990 to July 1993.

Bailey, A. M. 1927. Notes on the birds of southeast Alaska. Auk 44: 1-23; 184-205; 351-367.

Bethers, M. 1983. Interagency memo from ADF&F Sport Fish Division to Habitat Division on review of proposed stocking project. July 20, 1983.

Bethers, M. 1995. Fisheries Biologist ADF&G Sport Fish Division. Personal communication with D.Martin, Juneau Ranger District. January 1995.

Browning, D. 1983. Initial Survey of Ponds in the Mendenhall Campground. Internal Forest Service memo from Juneau Ranger District to Chatham Area office. July 6, 1983.

Browning, D. 1983. Note in files concerning proposed stocking project in the Mendenhall Campground. July 19, 1983.

Carpenter, K. 1994. Fisheries Biologist, Juneau Ranger District. Personal communication with D.Martin, Juneau Ranger District. December 1994.

City and Borough of Juneau and Alaska Department of Community Development. 1987. Juneau Wetland Function and Values.

City and Borough of Juneau, Juneau Police Department. Personal communication, Sheryl Nimi, February 1995. JPD Police Service reports, 1993 - March 1995.

City and Borough of Juneau, Juneau Parks and Recreation. 1995. Planning Survey on facilities and provided by Parks and Recreation. October 1995.

Collrin, Patrick, 1993. Personal communication. USDA Forest Service, in regard to estimate of percentage of cruise ship visitors to the Mendenhall Glacier Visitor Center.

Council on Environmental Quality. 1986. Regulations Implementing the Procedural Provisions of the National Environmental Policy Act. 40 CFR Parts 1500-1598. July 1, 1986.

- Days, Robert. 1995. Personal communication re: ORV sales in Juneau.
- DeLapp, John. 1991-93. Rare Vascular Plant Species of the U.S. Forest Service Alaska Region, 1992 Supplement, 1993 Supplement. Alaska Natural Heritage Program, Anchorage, Alaska.
- Gabrielson, I. N. and F. C. Lincoln. 1959. The birds of Alaska. The Stackpole Co., Harrisburg, VA, and the Wildlife Management Institute, Washington, D. C. 922 pp.
- Gibson, D.D. and S.O. MacDonald. 1975. Bird species and habitat inventory, mainland Southeast Alaska, summer 1974. USDA Forest Service, unpublished report, Juneau, Alaska.
- Godfrey, W.E. 1966. The birds of Canada. Nat. Mus. Can. Bull. 203:1-428.
- Gordon, R. 1994. Nesting Season Waterbirds - Mendenhall Forelands. Unpublished report for the U.S. Forest Service. 2 pp.
- Gordon, R. 1994. Scarcer Birds - Mendenhall Glacier Recreation Area. Unpublished report for the U.S. Forest Service. 2 pp.
- Hitchcock, C.L. A. Cronquist, M. Ownbey, and J.W. Thompson. 1955, 1959, 1961, 1964, 1969. Vascular Plants of the Pacific Northwest. Parts 1-5. University of Washington Press, Seattle, Washington.
- Hulten, E. 1968. Flora of Alaska and Neighboring Territories. Stanford University Press, Stanford, California.
- Humphrey, Lynn. 1994. Yakutat Ranger District Recreation Carrying Capacity Analysis.
- Interagency, 1993. The Juneau Trails Plan, A Cooperative Planning Effort. National Park Service, Alaska State Division of Parks, City/Borough of Juneau, USDA Forest Service.
- Juneau Convention and Visitors Bureau, 1994. Estimated Juneau cruise ship visitation in 1994.
- Juneau Convention and Visitors Bureau. 1995. "Cruise ship Passenger Traffic to Juneau, Alaska."
- Juneau Convention and Visitors Bureau. 1995a. "Juneau Air Arrivals Via Passenger Jet."
- Juneau Convention and Visitors Bureau. 1995b. "Juneau Alaska Marine Highway Arrivals."
- Juneau Convention and Visitors Bureau. 1995c. "1995 Visitor Statistics."
- Juneau Convention and Visitors Bureau. 1996. "Cruise Passenger Arrivals, Hotel Room Occupancy Rates, Ferry Passenger Arrivals, Passenger Jet Arrivals, 1990-1995." Data presented at Tourism Working Group Public Meeting, March 13, 1996.
- Juneau Empire. 1996. "One Less Cruise ship for Juneau," article discussing decreased cruise ship visitation in 1996 from earlier industry projections. March 13, 1996.
- Kartez, J.T. 1989. Working draft of vascular plants of Alaska. The Nature Conservancy, Arlington, Virginia.

- Marshall, Marti. 1993. Situk River Recreation Management Guidelines Carrying Capacity Analysis.
- MacDonald, S. and J. Cook. 1994. The Mammals of Southeast Alaska. University of Alaska Museum. 152 pp.
- McDowell Group, Inc. 1993. "Alaska Visitor Statistics Program: Alaska Visitor Patterns, Opinions and Planning, Summer 1993." Report for the Alaska State Department of Commerce and Economic Development, Alaska Division of Tourism. Pg 101.
- McDowell Group, Inc. 1994. "Executive Summary of Southeast Alaska Visitor Profiles." Report for the Southeast Alaska Tourism Council.
- Muller, M.C. 1991. Field Guide to Rare Vascular Plants of the National Forests in Alaska, USDA Forest Service, Alaska Region, Juneau, Alaska.
- Office of the Federal Register, National Archives and Records Administration, 1992. Code of Federal Regulations.
- Rice, Dick. 1995. Personal communication re: number of private boaters utilizing Mendenhall River.
- Shelby, Bo and Heberlein, Thomas. 1986. Carrying Capacity in Recreation Settings.
- Standley, L. 1985. Systematics of the Acutae group of *Carex* (Cyperaceae) in the Pacific Northwest. Syst. Bot. Monographs 7.
- Skibeness, Shannon, 1995. Carrying Capacity Study for National Forest System Lands in the Vicinity of Sixmile Creek, Chugach National Forest.
- Stensvold, M. 1994. A Working Guide to the Sensitive Plants of the Alaska Region, USDA Forest Service, Sitka, Alaska
- USDA Forest Service, 1965. Mendenhall Glacier Recreation Area Plan. December 7, 1965.
- USDA Forest Service, 1975. Mendenhall Glacier Recreation Area Management Plan. August 26, 1975.
- USDA Forest Service, 1980. Unpublished. Draft Interim Guidelines for the Mendenhall Glacier Recreation Area. Thrasher, Patrick.
- USDA Forest Service. 1983. Alaska Regional Guide. November, 1983.
- USDA Forest Service, 1985. Tongass Land Management Plan, Amended, Winter 1985-1986.
- USDA Forest Service, 1990. Forest Service Handbook 2309.27 Recreation Opportunity Spectrum Classes.
- USDA Forest Service, 1990a. Analysis of the Management Situation. Tongass National Forest Land Management Plan Revision.
- USDA Forest Service, Juneau Ranger District. 1990b. Waterfowl Survey Data for Mendenhall Recreation Area. Unpublished report and data.



USDA Forest Service, 1990c. Forest Service Manual 2371 Special Areas Management.

USDA Forest Service, 1991. Forest Service Manual 2309.18 Trails Management Handbook.

USDA Forest Service, 1991a. Forest Service Manual 2309.23 Publicly Managed Recreation Handbook.

USDA Forest Service, 1991b. Tongass Land Management Plan Revision. Supplement to the Draft Environmental Impact Statement.

USDA Forest Service, 1991c. Randle Ranger District, Gifford Pinchot National Forest. Environmental Assessment, Blue Lake Off-Highway Vehicle Plan. 1991.

USDA Forest Service, 1992a. Decision Memorandum for the Mendenhall Ponds Resident Fish Spawning Habitat Improvement. Tongass National Forest, Chatham Area, Juneau Ranger District. July 28, 1992.

USDA Forest Service, 1992b. Decision Notice and Finding of No Significant Impact for the Steep Creek Salmon Viewing Improvement Project. Tongass National Forest, Chatham Area, Juneau Ranger District, Mendenhall Glacier Recreation Area. September 15, 1992.

USDA Forest Service, 1992c. Forest Service Handbook 2709, Special Uses Administration. November 9, 1992.

USDA Forest Service, 1993. Forest Service Handbook 2509.22, Soils and Water Conservation. June, 1993.

USDA Forest Service, 1993. Environmental Assessment for Improvements to Mendenhall Glacier Visitor Center, Tongass National Forest, Alaska. March 1993.

USDA Forest Service, 1993a. Decision Notice and Finding of No Significant Impact for the Improvements to the Mendenhall Glacier Visitor Center. Tongass National Forest, Chatham Area, Juneau Ranger District, Mendenhall Glacier Recreation Area. March 5, 1994.

USDA Forest Service, 1993b. Environmental Assessment and Finding of No Significant Impact for the Mendenhall Glacier Campground and Skaters Cabin Renovation and Restoration. Tongass National Forest, Chatham Area, Juneau Ranger District. July 8, 1993.

USDA Forest Service, 1993c. Environmental Assessment, Decision Notice and Finding of No Significant Impact for the Dredge Lake Road Easement and Access. Tongass National Forest, Chatham Area, Juneau Ranger District. December 27, 1993.

USDA Forest Service, 1994. Forest Service Manual 2300 Recreation, Wilderness, and Related Resource Management.

USDA Forest Service, 1994. Forest Service Manual 2331.03 Publicly Managed Recreation Opportunities.

USDA Forest Service, 1994. Forest Service Manual 2333.32 Site Capacity.

USDA Forest Service, 1994. Forest Service Manual 2334.32 Site Management.

USDA Forest Service, 1994. Forest Service Manual 2340.3 Privately Provided Recreation Opportunities.

**USDA Forest Service, 1994. Forest Service Manual 2350 Trail, River, Off-Road Vehicle Management.**

**USDA Forest Service, 1994. Forest Service Manual 2720 Special Uses Administration.**

**USDA Forest Service, Cordova Ranger District, 1994. Recreation Use Carrying Capacity Analysis.**

**USDA Forest Service, Juneau Ranger District, 1994. Unpublished report. Mendenhall Glacier Visitor Center Commercial Operators Sign-In Log, 1994.**

**USDA Forest Service, Oregon Dunes National Recreation Area, Siuslaw National Forest, 1994. Final Environmental Impact Statement for the Oregon Dunes National Recreation Area Management Plan, Siuslaw National Forest. July 1994.**

**USDA Forest Service, Oregon Dunes National Recreation Area, Siuslaw National Forest, 1994. Management Plan for the Oregon Dunes National Recreation Area, July 1994.**

**USDA Forest Service, Juneau Ranger District, 1995. Special Use Permit files, 1981-1995.**

**USDA Forest Service, Juneau Ranger District, 1995a. Biological Evaluation of Plants, Mendenhall Glacier Recreation Area, Recreation Plan Revision, Juneau Ranger District, Tongass National Forest.**

**USDA Forest Service, Juneau Ranger District, 1995b. Biological Evaluation (Wildlife Species - Mendenhall Glacier Recreation Area), USDA Forest Service, Tongass National Forest.**

**USDA Forest Service, Juneau Ranger District, 1995c. Memo to Planning Record. Commercial Use Levels, 1981-1995, Mendenhall Glacier Recreation Area.**

**USDA Forest Service, Juneau Ranger District, 1995d. Memo to Planning Record. April 25, 1995 Meeting Notes with Dave Olson, Randle Ranger District, re: ORV Management on the Randle Ranger District.**

**USDA Forest Service, Juneau Ranger District, 1995e. Memo to District Ranger. Conversation with State and CBJ re: Areas Open to ORV Use.**

**USDA Forest Service, Juneau Ranger District, 1995f. Unpublished report. Mendenhall Glacier Recreation Area Recreation Management Plan Revision: Fisheries Resource Report.**

**USDA Forest Service, Juneau Ranger District, 1995g. Unpublished report. Mendenhall Glacier Recreation Area Wildlife Resource Reports.**

**USDA Forest Service, Juneau Ranger District, 1995i. Unpublished report. Officially Reported Incidences, Mendenhall Glacier Recreation Area, March 1990 - March 1995.**

**USDA Forest Service, Juneau Ranger District, 1995j. Memo to planning record. Parking at Mendenhall Glacier Visitor Center.**

**USDA Forest Service, Juneau Ranger District, 1995k. Unpublished report. West Glacier Trail use survey data, April 20, 1995.**

**USDA Forest Service, Juneau Ranger District, 1995m. Memo to planning record. Visitor complaint at Mendenhall Glacier Visitor Center.**

USDA Forest Service, Juneau Ranger District, 1996. Internal memo to Planning Record files documenting cruise ship industry projections, presented by Kirby Day, Princess Cruise Lines, at Tourism Working Group meeting, January 31, 1996.

USDA Forest Service, Juneau Ranger District, 1996a. Internal memo to Planning Record files documenting ORV program management costs for the Randle Ranger District, Gifford Pinchot National Forest ORV Program, and Closure Hour concerns for the Recreation Area. March 7, 1996.

USDA Forest Service, Juneau Ranger District, 1996b. Unpublished report. Juneau Ranger District Trail Inventory.

USDA Forest Service, Juneau Ranger District, 1996c. Unpublished report. Capacity Analysis and Commercial Use Allocations, Mendenhall Glacier Recreation Area.

USDA Forest Service, Juneau Ranger District, 1996d. Internal memo to Planning Record regarding estimates of non-commercial use in the Recreation Area.

USDA Forest Service, Juneau Ranger District, 1996e. Unpublished report. Incident Reports, March 1995 through April 1996.

Van Horn, Dennis. 1979. U.S. Forest Service memo 2630 Mendenhall Tern Colony - "Arctic Tern Mendenhall Nesting Colony. January 19, 1979.

Van Horn, Dennis. 1978. U.S. Forest Service memo 2620 Planning - "Arctic Tern: Human Disturbance of the Mendenhall Nesting Colony". May 26, 1978.

Van Hulle, F. 1981. Letter from ADF&G to Juneau Ranger District concerning proposed enhancement activities on Glacier and Moraine Lakes. November 16, 1981.

Wagner, D. H. 1979. Systematics of *Polystichium* in western North America north of Mexico. *Pteridologia* 1:1-64.

Wagner, D. H. 1995. Telephone conversation with Mary Stensvold.

Walker, E. P. 1920. Southerly nesting records of the Arctic Tern in southeastern Alaska. *Condor* 22:72-73.

Welsh, S.L. 1974. *Anderson's Flora of Alaska and adjacent parts of Canada*. Brigham Young University Press, Provo, Utah.

Williams, R. B. 1947. Notes on the Arctic Tern in Alexander Archipelago, southeastern Alaska. *Auk* 64:143-144.

Whittaker, Doug. 1990. Susitna Basin Recreation Rivers. "White Papers" on Critical Planning Issues. Report prepared for the State of Alaska Department of Natural Resources, Memorandum of Understanding No. 9700-0-9004.

Wright, B., F. Glass, and R. Gordon. 1983. Arctic Tern and Gull Nesting Activity Near Mendenhall Lake, Juneau, Alaska. Unpublished report to the U.S. Forest Service, Juneau Ranger District. 15pp.

**USDA Forest Service**  
**JUNEAU RANGER DISTRICT**  
**8465 OLD DAIRY ROAD**  
**JUNEAU, AK 99801**  
**OFFICIAL BUSINESS**  
**PENALTY FOR PRIVATE USE, \$300**

---

**FIRST CLASS MAIL**  
**POSTAGE & FEES PAID**  
**USDA F.S. / JUNEAU, AK**  
**PERMIT NO. G-40**

---